

REPUBLIC OF THE UNION OF MYANMAR
NATIONAL EXPORT STRATEGY
QUALITY MANAGEMENT
CROSS-SECTOR STRATEGY 2015-2019



Myanmar Ministry of Commerce



International
Trade
Centre

The National Export Strategy (NES) of Myanmar is an official document of the Government of the Republic of the Union of Myanmar.

For any queries about the NES, please contact:

**The Department of Trade Promotion
Ministry of Commerce**

Office No.3, Zeya Htani Road
Nay Pyi Taw

Phone: +95 67 408495 / +95 67 408266

Fax: +95 67 408256

E-mail: nesmyanmar@gmail.com

The reproduction, publishing or transmission in any form or by any means of all or any part of the publication is prohibited without the permission of the Ministry of Commerce of the Republic of the Union of Myanmar.

The National Export Strategy of the The Republic of the Union of Myanmar was developed on the basis of the process, methodology and technical assistance of the ITC. The views expressed herein do not reflect the official opinion of the ITC. This document has not been formally edited by the ITC.

Layout: Jesús Alés – www.sputnix.es

Photos: © ITC

The **International Trade Centre** (ITC) is the joint agency of the World Trade Organization and the United Nations

Street address: ITC 54-56, rue de Montbrillant 1202 Geneva, Switzerland

Postal address: ITC Palais des Nations 1211 Geneva 10, Switzerland

Telephone: +41-22 730 0111

Fax: +41-22 733 4439

E-mail: itcreg@intracen.org

Internet: <http://www.intracen.org>

THE REPUBLIC OF THE UNION
OF MYANMAR

NATIONAL EXPORT STRATEGY
QUALITY MANAGEMENT

CROSS-SECTOR STRATEGY 2015-2019



Myanmar Ministry of Commerce



International
Trade
Centre



ACKNOWLEDGEMENTS

The following Quality Management cross-sector strategy forms an integral part of Myanmar's National Export Strategy (NES). The NES was made possible with the support of the Government of the Republic of the Union of Myanmar (GRUM), under the leadership of Myanmar Ministry of Commerce (MoC), the financial support from Germany's Federal Ministry for Economic Cooperation and Cooperation (BMZ) in collaboration with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the technical assistance of the International Trade centre (ITC).

The coordination support of MoC

– Department of Trade Promotion (DoTP):

- **Mr. Aung Soe**
Deputy Director General (NES Navigator)
- **Ms. Naw Muta Kapaw**
Director
- **Ms. Thidar Win Htay**
Assistant Director
- **Ms. Mya Mya Sein**
Assistant Director

The Directorate of Trade:

- **Ms. Shwe Zin Ko**
Assistant Director, Department of Trade Promotion,
Ministry of Commerce

The members of the strategy team:

- **Dr. Tun Zaw**
Director, Food and Drug Administration (FDA)
- **Dr. Aung Myint**
Deputy Director, Ministry of Industry
- **U Nay San**
Deputy Director, DoTP, MoC
- **U Kyaw Thu**
Deputy Director, DoTP, MoC
- **Daw May Than Chit**
Deputy Director, Small Scale Industries Department,
Ministry of Cooperatives
- **Daw Phyu Phyu Win**
Deputy Director, DoTP, MoC
- **Dr. Myat Myat Soe**
Head of Office, Metallurgical Research Development
Centre, Department of Technology Promotion and
Coordination
- **Daw Nilar Thein**
Assistant Director, DoTP, MoC
- **U Zaw Win**
Assistant Director, DoTP, MoC
- **U Kyaw Lwin**
Assistant Director, Ministry of Agriculture & Irrigation
(MoAI)
- **Dr. War War Moe, Principle Scientist, Myanmar
Scientific and Technological Research Department**
- **U Thet Naing**
Staff Officer, Department of Fisheries (DoF)
- **U Kyaw Soe**
General Manager, MITS
- **Dr. Aye Kyaw**
Manager, Myanmar Food Processors and Exporters
Association
- **U Ohn Than**
Chief Executive, Myanmar Rubber Planters &
Producers Association
- **Daw San San Win**
Assistant General Manager/Coordinator, MITS
- **Daw Aye Myint Oo**
Assistant General Manager, MITS
- **U Htay Shwe**
Assistant General Manager, MITS
- **U Aung Kyaw Htoo**
Business Manager, Societe Generale De Surveillance
- **U Zaw Myo Kyaw**
Managing Director, United World Industries Co., Ltd
- **U Maung Maung Myint**
Assistant General Manager, Oversea Merchandise
Inspection Co., Ltd

The strategy team leader:

- **Ms. San San Win,**
Assistant General Manager, Myanmar Inspection
and Testing Services (MITS)

International Trade Centre:

- **Mr. Charles Roberge**
Associate Adviser, Export Strategy
- **Mr. Robert Kafafian**
International consultant
- **Ms. Marnie McDonald**
Document coherence and consistency

ACRONYMS

ASEAN	Association of Southeast Asian Nations	MoNPED	Ministry of National Planning and Economic Development
CTQM	Commodity Testing & Quality Management	MRA	Mutual Recognition Agreement
DoF	Department of Fisheries	MSTRD	Myanmar Scientific and Technological Research Department
DoTP	Department of Trade Promotion	MTDC	Myanmar Trade Development Committee
EU	European Union	NAB	National Accreditation Body
FAO	Food and Agriculture Organization of the United Nations	NAFP	National Accreditation Focal Point
FDA	Food and Drug Administration	NES	National Export Strategy
FIDSL	Food Industries Development Supporting Laboratory	NMI	National Metrology Institute
FIQCD	Fish Inspection and Quality Control Division	NQI	National Quality Infrastructure
GAP	Good Agricultural Practice	NSB	National Standards Body
GAqP	Good Aquaculture Practice	PoA	Plan of Action
GHP	Good Hygiene Practice	PTAC	Postharvest Technology Application Centre
GMP	Good Manufacturing Practice	PTB	Physikalisch-Technische Bundesanstalt (German Metrology Institute)
HACCP	Hazard Analysis and Critical Control Point	QM	Quality Management
IEC	International Electrotechnical Commission	QMI	Quality Management Infrastructures
ISO	International Organization for Standardization	SD	Standards Department
ITC	International Trade Centre	SPS	Sanitary and Phytosanitary Measures
MITS	Myanmar Inspection and Testing Services	TBT	Technical Barriers to Trade
MoAI	Ministry of Agriculture and Irrigation	TSI	Trade Support Institution
MoC	Ministry of Commerce	TSN	Trade Support Network
MoFR	Ministry of Finance and Revenue	UMFCCI	Union of Myanmar Federation of Chambers of Commerce and Industry
MoH	Ministry of Health	UNIDO	United Nations Industrial Development Organization
MoLFRD	Ministry of Livestock, Fisheries and Rural Development	WTO	World Trade Organization

CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	5
WHERE WE ARE NOW	7
CURRENT CONTEXT	7
THE INSTITUTIONAL PERSPECTIVE	16
DEVELOPMENT INITIATIVES	21
LEGAL AND LEGISLATIVE FRAMEWORK	22
COMPETITIVENESS CONSTRAINTS	27
WHERE WE WANT TO GO	34
THE FUTURE PERSPECTIVE: THE WAY FORWARD	34
HOW TO GET THERE	35
STRATEGIC OBJECTIVES	35
IMPORTANCE OF COORDINATED IMPLEMENTATION	35
PLAN OF ACTION	37
APPENDIX 1 : MEMBERS OF SECTOR TEAM	46
BIBLIOGRAPHY	48

LIST OF FIGURES

Figure 1: Proposal for the redesigned SD	6
Figure 2: ISO certification in Myanmar	13

LIST OF TABLES

Table 1: National priority areas for the development and harmonization of standards	9
Table 2: Quality services provided by the private sector in Myanmar	15
Table 3: Evaluation of performance for institutions of Myanmar’s quality policy support network	16
Table 4: Evaluation of performance for institutions in Myanmar’s quality trade services network	19
Table 5: Evaluation of performance for institutions in Myanmar’s quality business services network	19
Table 6: Evaluation of performance for institutions in Myanmar’s quality civil society network	20
Table 7: Perception of Myanmar’s quality TSIs – influence versus capacities	21
Table 8: Food products laboratories in Myanmar	26

BOXES

Box 1: Building blocks for the quality cross-sector strategy	4
Box 2: Quality and trade development	6
Box 3: Responsibilities of the Standards department and Standards Division	8
Box 4: Key international certifications relevant to enterprises in the NES product sectors	11
Box 5: SPS framework	23
Box 6: Laws governing plant and animal health in Myanmar	24
Box 7: Regulation under the FDA	25
Box 8: Regulation under DoF	26
Box 9: Policy issues affecting quality in Myanmar	27
Box 10: Institutional issues affecting quality in Myanmar	29
Box 11: Enterprise issues affecting quality in Myanmar	32



EXECUTIVE SUMMARY

The analysis and strategy presented in this document form an integral part of the NES of Myanmar. Modern trade expansion requires a strong quality cross-sector that can ensure the compliance of goods to both technical and voluntary standards, as well as ensuring food safety and animal and plant health. Challenges within Myanmar's quality function, however, have thus far hindered the ability of its exporters to fully capitalize on new opportunities and enhance their competitiveness. Addressing these challenges will allow Myanmar's enterprises to form stronger export relationships and introduce goods to new, more demanding markets. The performance of key priority sectors of the NES, therefore, will to a large extent depend upon Myanmar's ability to foster a stronger quality cross-sector.

CURRENT STATE OF QUALITY IN MYANMAR

Deficiencies in Myanmar's national quality technical infrastructures¹ are especially noticeable in the fields of standardization and metrology as a result of inadequate human resources, equipment and facilities.² Standards are outdated, accreditation capacities are non-existent, and certification capacities are underdeveloped. Testing laboratories fare slightly better, as evidenced by the presence of a Ministry of Livestock, Fisheries and Rural Development (MoLFRD) laboratory that is accredited for the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 17025:2005 'General requirements for the competence of testing and calibration laboratories'.³ Stakeholders estimate that a number of other laboratories could achieve accreditation with the support of some investment. In addition, private sector laboratories are gradually emerging as providers of services not currently offered in Myanmar.

1. Refers to policies, technical regulations, standards, SPS measures, conformity assessments, quality-related institutions and regulatory bodies.

2. UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, p. 3. (v1).

3. *Ibid.*

Despite various difficulties, Myanmar has taken a number of steps aimed at strengthening its quality management (QM) capacities. A new quality policy, for example, is being formulated in line with best international practices as well as World Trade Organization (WTO) rules and regulations. In addition to reorganizing the Standards Department (SD) into a Standards Development Division, a Conformity Assessment Division and a Metrology Division, the policy foresees the creation of 19 technical committees empowered to modernize standards. The inclusion of public-private dialogue in this process will help ensure that the new standards are aligned with private sector needs. Nonetheless, and despite significant progress, a number of issues must be addressed in order to ensure that Myanmar has the capacity to consistently deliver products of internationally recognized quality to the export market.

COMPETITIVENESS CONSTRAINTS

The following challenges have been identified for the quality function:

Policy challenges:

- Absence of a national quality policy;
- Inadequate metrology system;
- Outdated standards;
- Inadequate number of mutual recognition agreements (MRAs);
- Lack of a national accreditation body (NAB).

Institutional challenges:

- Limited laboratory capacities;
- Lack of coordination and resource sharing within the QM framework;
- Inadequate border testing;
- Absence of an effective traceability system;
- Lack of qualified trainers and inspectors for Good Aquaculture Practice (GAqP), Good Agricultural Practice (GAP), Good Manufacturing Practice (GMP) and Good Hygiene Practice (GHP) based on international standards;
- Limited implementation of product surveillance programmes.



Enterprise challenges:

- Inadequate knowledge of quality requirements on the part of farmers and traders;
- Limited application of GMP;
- Inability of exporters to comply with buyer requirements.

OPTIONS FOR FUTURE DEVELOPMENT

Greater QM capacities would have far-reaching impacts on Myanmar's export value chain. In addition to facilitating stronger, long-term export relationships and helping enterprises introduce goods to new, more demanding markets, the strategic options set forth here should ultimately lead to more stable socioeconomic development for Myanmar.

In line with the list of issues identified, the following vision has been developed for the quality cross-sector function:

“ A consistent and reliable national quality infrastructure continuously adapting to Myanmar's growth trajectory and enabling its products to be recognized nationally and internationally. ”



ROADMAP FOR STRATEGY IMPLEMENTATION

The vision and the key features for the function will be achieved through the implementation of the strategy's Plan of Action (PoA). The PoA revolves around the following four strategic objectives, each spelling out specific sets of activities intended to address the challenges faced by the quality function in Myanmar:

- Revise and modernize policies, regulations, standards, and sanitary and phytosanitary (SPS) measures, and effectively implement them to comply with international regulations;
- Upgrade the trade-facilitating technical regulatory framework in order to build confidence and transparency between producers and consumers and adequately develop trade;
- Enhance awareness and knowledge of the importance of quality and embed a quality/safety culture with adoption of best practices in quality by farmers, processors, exporters and traders;
- Improve coordination and collaboration both within the quality management infrastructure (QMI) – through strengthened public-private dialogue and partnerships – and with regional and international partners.

The achievement of these ambitious targets will require continuous and coordinated efforts from all relevant private and public stakeholders as well as support from key financial and technical partners, donors and investors. Several institutions are designated to play a leading role in the implementation of the sector PoA and bear the overall responsibility for successful execution of the strategy. They will be assisted by a range of support institutions which are active in the sector. Each institution mandated to support the export development of the sector is clearly identified in the strategy PoA.

Moreover, a Myanmar Trade Development Committee (MTDC) was established in order to facilitate the public-private partnership in elaborating, coordinating and implementing the NES. In particular, the MTDC is tasked with coordinating the implementation of activities in order to optimize the allocation of both resources and efforts across the wide spectrum of stakeholders. Within this framework, implementation of the quality strategy also falls within the purview of the MTDC, in close collaboration with the cross-sector apex organization.

Box 1: Building blocks for the quality cross-sector strategy

The following analytical components constitute the building blocks for the quality cross-sector strategy:

Current state of the Myanmar quality function

This section discusses the relevance of quality for Myanmar export development and provides an overview of the national framework. This overview serves as a base for a broader analysis of the performance and efficiency of the quality function in Myanmar.

Competitiveness constraints

The effectiveness and efficiency of quality technical infrastructures are currently restricted by a host of constraints at both institutional (supply-side) and enterprise (demand-side) levels. These wide-ranging constraints have resulted in restricted access to international markets for Myanmar exporters. The competitiveness constraints section discusses these important challenges and their impact on current and potential exporters.

Trade Support Network (TSN) analysis

Trade support institutions (TSIs) are organizations that have a bearing on the development and delivery of quality services in Myanmar. An analysis of the effectiveness and capacity gaps affecting these TSIs is important to ascertain the efficiency of the entire quality framework. The TSN analysis section assesses individual TSIs on their capacities in four dimensions: coordination, financial sustainability, human capital and advocacy. Analysis is also conducted to assess the TSIs based on their level of influence versus their capacity to respond to client needs. A composite picture of the strengths and weaknesses of the cross-sector's TSN is thus developed.

Analysis of development activity for Myanmar QM

Gaining an understanding of development activity in the cross-sector holds relevance, since it helps to identify the main thrusts of the various development actors and their initiatives, while also identifying gaps that need to be addressed. This section analyses current development activity for the quality function.

How to get there

The "how to get there" section highlights the key strategic orientations of the strategy and discusses the way forward. This includes the vision for the cross-sector, the strategic objectives and the implementation management framework.

The analyses and recommendations are based on national level consultations supported by external analytical research. Once endorsed, as part of the NES, by the Republic of the Union of Myanmar, the quality strategy will serve as a roadmap for private and public stakeholders to collaborate for the improvement of the QM framework.

INTRODUCTION

The analysis and strategy presented in this document form an integral part of the NES of Myanmar. The existence of an efficient, effective and internationally recognized quality infrastructure, including food safety and plant and animal health, will not only grant Myanmar exports effective access to most international markets but will also be a key determinant of the competitiveness and export performance of the key priority sectors of the NES.

Despite a number of attempts to enhance QM institutions in Myanmar, a unified quality technical infrastructure is by and large still to be developed, including building standard-setting systems, conformity assessment and testing capability, testing infrastructure, technical knowhow and international recognition of Myanmar certificates. While advances in these areas may be made independently, it is only through synergetic interaction that a truly modern infrastructure can be created and leveraged to support export competitiveness. Without a clear, result-oriented and measurable set of activities and engagement of stakeholders it will be difficult for Myanmar to realize the holistic transformation that is needed to stimulate a dynamic and modern trade development infrastructure.

It is in this regard that the efficient implementation of the quality strategy roadmap will be critical. This document presents the expectations and the strategic objectives of the private and public sectors for the enhancement of the quality function in Myanmar. Without concerted efforts to address critical issues, Myanmar's trade will continue to face major challenges in accessing foreign markets, as basic technical requirements (standards, technical regulations and SPS measures) remain inadequately met. However, as suggested by this strategy, there is significant potential for alleviating the current challenges through wide-ranging interventions at the institutional and enterprise levels.

HISTORICAL OVERVIEW

The roots of Myanmar's Quality Management Infrastructures (QMI) date back to the creation of the Union of Burma Applied Research Institute in 1954.⁴ Since its inception, the Union of Burma Applied Research Institute, later to be known as the Central Research Organization, was the sole government department tasked with conducting technical and scientific research and development activities geared at promoting national economic and industrial progress.

The organization had a number of technical support departments including the SD, which was established in 1956.⁵ This Department, which was composed of the Standards Division, the Metrology Laboratory and the Standards Library, began to play a leading role in developing and implementing QM services.

In 1994, the passage of Myanmar's Science and Technology Development Law furthered cross-sector development through the creation of the Ministry of Science and Technology, of which the newly named Myanmar Scientific and Technological Research Department (MSTRD), formerly the Central Research Organization, was an integral part.⁶ The new law specifically tasked MSTRD with 'conducting standardizations and specifications of weights and measures, equipment and machinery, raw materials and finished goods.'⁷

4. Republic of the Union of Myanmar, Ministry of Science and Technology (2007). Myanmar Scientific and Technological Research Department (MSTRD). Available from http://www.most.gov.mm/index.php?option=com_content&task=view&id=83.

5. UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, p. 4. (v1).

6. UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, p. 4. (v1).

7. *Ibid.*

Box 2: Quality and trade development

While recent decades have witnessed a marked decline in tariffs, exporters have found themselves subject to an increasing burden of non-tariff barriers. Modern consumers continuously demand higher quality products, while governments have intervened in order to guarantee the safety, quality and consistency of imports. Exporters have thus been faced with an increasing need to ensure that their products meet the international standards of both markets and governments. In the modern export environment, ensuring compliance with both voluntary and regulatory market requirements is necessary not only for entering new and demanding markets but also for gaining consumer trust.

QM refers to 'all activities of the overall management functions that determine the quality policy, objectives and responsibilities, and implement them by means such as quality planning, quality control, quality assurance and quality improvement' (MS ISO 8402, 1994). It also includes 'coordinated activities to direct and control an organization with regard to quality' (ISO 9000:2005 3.2.8).

The quality cross-sector function includes the following four indispensable elements.

- Quality planning is 'a part of quality management focused on setting quality objectives and specifying necessary operational processes and related resources to fulfil quality objectives' (ISO 9000:2005 3.2.9).
- Quality control is 'a part of quality management focused on fulfilling quality requirements' (ISO 9000:2005 3.2.10).
- Quality assurance is 'a part of quality management focused on providing confidence that quality requirements will be fulfilled' (ISO 9000:2005 3.2.11).
- Quality improvement is 'a part of quality management focused on increasing the ability to fulfil quality requirements' (ISO9000:2005 3.2.12).

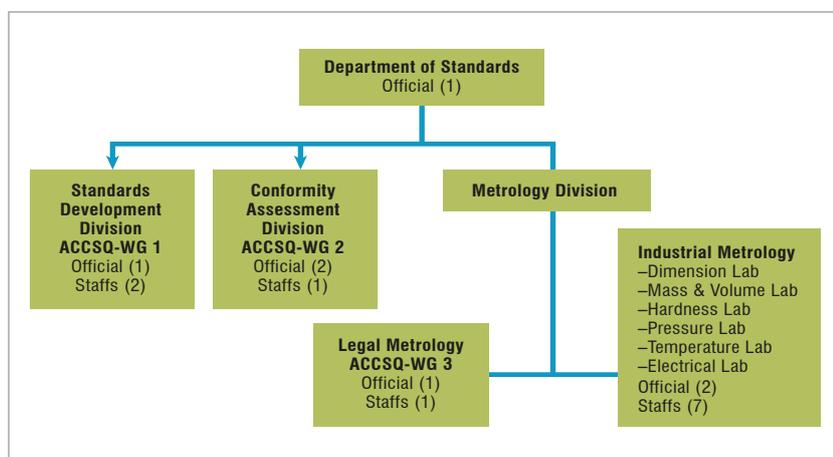
Despite significant progress, the government of Myanmar has recognized the need to further enhance quality services in order to guarantee strong economic development. As such, it is currently developing a national quality policy that is in line with best international practices as well as WTO rules and regulations. Key components of this new policy are two pieces of legislation: the Standards Law and the Metrology Law, which are currently in various stages of drafting and approval. The introduction of these laws will be accompanied by a reorganization of the SD.⁸ The new

structure will include a Standards Development Division, a Conformity Assessment Division and a Metrology Division. The latter will be comprised of both a Legal Metrology Department as well as an Industrial Metrology Department supported by a variety of laboratories.

While much work remains to be done, a new quality policy will play a key role in strengthening Myanmar's capacity to consistently deliver products of internationally recognized quality to the export market.

8. *Ibid.*, pp. 1, 6.

Figure 1: Proposal for the redesigned SD



Source: UNIDO (Myanmar Standards Department) (2013). Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report), p. 1.

WHERE WE ARE NOW

CURRENT CONTEXT

Despite Myanmar's proximity to some of the world's fastest growing markets, export competitiveness has been hampered by a National Quality Infrastructure (NQI) that has been thus far incapable of ensuring the compliance of goods to both technical and voluntary standards. The inadequacy of the quality cross-sector has hindered the ability of exporters to capitalize fully on new opportunities and pursue export expansion.

A recent study by the United Nations Industrial Development Organization (UNIDO) concluded that deficiencies in the NQI are especially noticeable in the fields of standardization and metrology as a result of inadequate human resources, equipment and facilities.⁹ Testing laboratories fare slightly better, as evidenced by the presence of a MoLFRD laboratory that is accredited for the ISO/IEC 17025:2005 'General requirements for the competence of testing and calibration laboratories'.¹⁰ Also, private sector laboratories are gradually emerging to provide services not currently provided in Myanmar.

The focal point for QM is MSTRD, which is divided into three departments: the SD, the Standards Library and the Metrology Division. Additional QM services are provided by different government ministries, some of which are equipped with laboratories and a variety of control functions. These include the Ministry of Health (MoH), whose food division of the FDA is the contact point for the Codex Alimentarius Commission and responsible for enforcing food safety legislation.¹¹

In order to facilitate a more in-depth analysis, Myanmar's quality cross-sector can be categorized according to its

four principal functions: standardization, metrology, conformity assessment services and accreditation. These functional areas are the pillars upon which an efficient NQI relies.

STANDARDIZATION

Standardization refers to the definition of properties that include but are not limited to dimension, weight and tolerance. As such, a standard functions as a measure of normalcy to which products and processes can align. Two types of standards exist for the purpose of QM. Public standards are those that are developed in accordance with internationally agreed upon principles such as transparency, stakeholder involvement and consensus. Such standards are contained in ISO/IEC directives and relevant parts of the WTO Technical Barriers to Trade (TBT) agreement. As a stakeholder-driven process the local export industry, no matter how small, can influence these standards through their national standards body (NSB). Private standards are those that are developed by a closed group of stakeholders according to their own interests. These standards are subject to little interference or influence from outside stakeholders.¹²

The SD of MSTRD is the government body responsible for standardization, metrology and accreditation in Myanmar.¹³ While the Department is currently comprised of the Standards Division, the Metrology Laboratory and the Standards Library, the Metrology Department will soon be divided into two sub-departments: Legal Metrology and Industrial Metrology.¹⁴ Although MSTRD employs roughly 250 well-trained staff, the SD is severely understaffed.¹⁵ Of its 20 employees, three work for Legal Metrology and seven work at the Industrial Metrology

9. *Ibid.*, p. 3. (v1).

10. *Ibid.*

11. Wai Yee Lin & Masahiro Yamao (2012). An Assessment of Food Control System and Development Perspective: The Case of Myanmar. *International Science Index*, vol. 6, No. 9 (26 September), p. 752. World Academy of Science, Engineering and Technology.

12. ITC (2011). *Export Quality Management: A Guide for Small and Medium-Sized Exporters, Second Edition*. Geneva.

13. *Ibid.*, pp. 3-4. (v1).

14. *Ibid.*, p. 4.

15. *Ibid.*, p. 4. (v1).

calibration laboratories.¹⁶ It should be noted that MSTRD operates a recently refurbished laboratory for the purposes of analysing food quality (macro and micro nutrients, additives).¹⁷

In order to promote the diffusion of best practices, MSTRD is a correspondence member of ISO, an affiliate member of the IEC, and a WTO TBT enquiry point.¹⁸ The Standards Division was originally charged with diffusing information related to international standards, foreign standards and measurements to stakeholders. This role later evolved to include functions of an NSB, including the creation and adoption of 65 national standards in the 1970s. These include one agricultural and food product standard, 10 chemical standards, 11 civil engineering standards, nine electrical standards and 27 textile standards.

The SD is also the focal point for the Association of Southeast Asian Nations (ASEAN) Consultative Committee on Standards and Quality, participating in its Working Groups on both Standards and MRAs as well as Accreditation and Conformity Assessment (WG1 and WG2 respectively).¹⁹

16. *Ibid.*

17. *Ibid.*, p. 27.

18. UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, p. 5.

19. *Ibid.*

The Standards Library meanwhile contains an archive of standards issued by various world bodies between 1956 and the 1980s.²⁰ More recent standards are unavailable due to the Western embargo to which Myanmar was subject over the last three decades. These archives include standards of the ISO and IEC, the United Kingdom of Great Britain and Northern Ireland, India, Germany, Japan, Malaysia, and the United States of America. Although the library is open to all who are interested, the copies of these standards are only available in paper form as digital versions do not exist. The most widely consulted and applied standards are those from the United States, India and the United Kingdom.

In accordance with the new Standards Law that is took effect in 2013, the Standards Division has been expanded to include the Standards Library and renamed the Standards Development Division.²¹ The SD and the Standards Division will function as Myanmar's NSB, although its official recognition as such is still uncertain. This development will, however, be facilitated by its lack of regulatory authority, which could otherwise be a conflict of interest with its NSB roles. It is unclear whether or not the Department will adopt the 'Code of Good Practice for the Preparation, Adoption and Application of Standards' called for in the WTO TBT agreement. Moreover, should it be designated an NSB, it will be required to implement the ASEAN Policy Guideline on Standards and Conformance.

20. *Ibid.*

21. *Ibid.*, pp. 6–7.

Box 3: Responsibilities of the Standards department and Standards Division

- 'Preparation and promulgation of national standards, guidelines and conformity assessment procedures;
- Harmonizing national standards with international standards and guidelines and conformity assessment procedures;
- Promotion of the implementation of standards by industry;
- Provision of information on standards and related technical matters, with regard to both national and international standards;
- Country representation in international activities and at forums that deal with standards; and
- Certification of products to national and international standards^{1*}

Source: UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, p. 6.

* *Ibid.*, p. 6.

Table 1: National priority areas for the development and harmonization of standards

Industrial infrastructure	Consumer & environment	Information technology & electro-technology	Management systems
<ul style="list-style-type: none"> • Construction • Automobile • Mechanical engineering • Energy • Wood • Rubber 	<ul style="list-style-type: none"> • Foods • Agriculture • Fisheries • Water • Pharmaceutical • Chemical & biotech • Medical devices • Cosmetics • Traditional medicine 	<ul style="list-style-type: none"> • Information • Technology • Electrotechnical (electrical & electronic) 	<ul style="list-style-type: none"> • Quality • Environment • Safety

Source: Win, Dr. P.P. (MSTRD). Current Status of Quality Management Infrastructure in Myanmar. ESCAP presentation.

The new Standards Law established a Standards Committee involving both public and private stakeholders, with the mandate to review and approve the newly designed standards. Chaired by the Ministry of Science and Technology, this Committee is also responsible for preparing policy related to standards, accreditation, conformity assessment and certification. It will also play an advisory role for issues related to legal metrology. The creation of 19 technical committees has already been completed to ensure public–private dialogue for the development and harmonization of new standards. The members are actively participating to develop national standards in the relevant sectors (table 1). It is planned that the technical committees will elaborate 30 standards in the next few years.

METROLOGY

Metrology, whose role within the QM framework is to guarantee the accuracy of weights and measures, includes both legal and industrial metrology. Legal metrology is that part of metrology that seeks to ensure that measuring instruments used in trade, law enforcement and health services, for example, are accurate throughout their service life. This is to ensure that an equitable transactional situation exists between the consumer, citizen or patient and traders, law enforcement agencies or health services. Industrial metrology seeks to guarantee that measurement instruments and processes function during production and testing.²²

While the Metrology Division of MSTRD is responsible for all issues related to metrology in Myanmar, its capacities and roles are not aligned with international standards. It is severely understaffed, relying on three employees who work in legal metrology and seven employees who work at

the industrial metrology calibration laboratories.²³ It should be noted that plans for the restructuring of MSTRD are expected to result in its subdivision into a legal metrology division and an industrial metrology division (see figure 1).

A key role in legal metrology services is normally fulfilled by the National Metrology Institute (NMI). This body is charged with creating, diffusing and maintaining national standards for measurement. Of utmost importance is the traceability of all measurements throughout the cross-sector. Not only does Myanmar not have an NMI but there is no organization tasked with overseeing issues related to weights and measures.²⁴ Moreover, the lack of an inspectorate means that there is no authority empowered to verify the measurements used in transactions.²⁵

In addition to deficiencies in the legal metrology infrastructure, Myanmar has thus far not engaged in efforts to harmonize metrology with international standards. It has not signed the Metre Convention, nor has it adopted the System of International Units.²⁶ Further failing to capitalize on opportunities for regional and global integration, it is not a member of either the Asia-Pacific Legal Metrology Forum or the International Organization for Legal Metrology, although the Metrology Division is a member of the ASEAN Consultative Committee on Standards and Quality Working Group 3 on legal metrology.²⁷

23. *Ibid.*, p. 4. (v1).

24. NES QM initial assessment questionnaire completed by San San Win, team coordinator; and UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, p.3.

25. *Ibid.*, p. 2.

26. *Ibid.*, p. 1.

27. NES QM initial assessment questionnaire completed by San San Win, team coordinator; and UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, p.2.

22. ITC (2011). *Export Quality Management: A Guide for Small and Medium-Sized Exporters, Second Edition*. Geneva.



National laws related to legal metrology are also outdated, the most recent legislative act having been passed in 1939.²⁸ Laws dating from 1871 are still on the books, and current legislation and institutional arrangements do not provide for enforcement. Most local transactions still rely on traditional Burmese measurements. A new metrology law was developed in 2007 with the assistance of New Zealand and will soon be adopted by the Attorney General as the new basis for metrology in Myanmar.²⁹

While the state of industrial metrology is relatively more developed, it is still lacking in its ability to support modern export development. MSTRD has operated a calibration laboratory since 1954.³⁰ The laboratory, which performed roughly 900 calibrations in 2012, maintains secondary and reference standards for the measurement of volume, pressure, temperature, acidity, weight, mass, length and capacity. Although equipment and capacities were upgraded in 2001, the laboratory's calibrations are not considered reliable according to international standards. This is the result of inadequate maintenance of secondary and reference standards, as well as the lack of traceability capacities, which would require either an NMI or an ISO 17025 accredited laboratory. The UNIDO assessment has concluded that significant investments in human resources and secondary and reference standards are required before the Metrology Division is capable of performing reliable calibration services.³¹

28. *Ibid.*, pp. 1–2.

29. Win, Dr. PP (MSTRD). Current Status of Quality Management Infrastructure in Myanmar. ESCAP presentation.

30. *Ibid.*, p. 3.

31. *Ibid.*, pp. 3–4.

CONFORMITY ASSESSMENT SERVICES

Certification

The purpose of certification is to attest conformity with national, regional (ASEAN) and international standards. As such, it may attest either to the compliance of products or to the producer. As certification may be public or private, certifying bodies are found in both NSBs and private organizations. Certifying bodies should be accredited with ISO/IEC 17021 for system certification and ISO/IEC 17065:2012 (this replaces ISO/IEC Guide 65) for product certification. Organizations wishing to provide certification to private standards must be accredited by the organizations in charge of the relevant system.³²

MITS, of the MoC, is the government body tasked with providing certification services.³³ It is mandated to inspect and verify all imported and exported agricultural products, industrial products and manufactured goods. More specifically, it provides pre-export and import inspections, sampling and testing, and agro-product fumigation services, generally operating at the main ports. Where relevant, MITS provides certification of compliance with quality parameters. As MITS does not have its own laboratory, it leverages those of other ministries for its testing services.³⁴ MITS is accredited to ISO 9001 QM systems.

The services provided by Myanmar's public sector are supplemented by private sector certification.³⁵ Among other product and systems certification services, Société Générale de Surveillance offers certification to ISO 22000. The Indian subsidiary of Certification International provides an array of product and systems certifications. Yangon Logistics Co. offers a range of certifications, although they are only accredited to offer ISO 9001.

32. ITC (2011). *Export Quality Management: A Guide for Small and Medium-Sized Exporters, Second Edition*. Geneva.

33. *Ibid.*, p. 16.

34. *Ibid.*, p. 17.

35. *Ibid.*, p. 18.

Box 4: Key international certifications relevant to enterprises in the NES product sectors

ISO 9001 or QM international standards

ISO 9001 standards are issued by ISO. ISO 9001 QM requirements can be applied by any organization regardless of its size and nature of operations or products/services. It can be applied in hospitals, banks, telecommunications companies, small and medium enterprises, large companies and multinational companies.

Implementing ISO 9001 will ensure that a company has an internal integrated management system with minimum quality requirements, and that the company has the methodology for improving its quality in terms of processes and products, since ISO 9001 includes documentation requirements. An ISO 9001 certified company should document its internal systems and procedures (administrative system and human resources, support system and core technical systems) with clear performance indicators to measure whether the short-term objectives of the company have been achieved or not. In addition, ISO 9001 certification includes clear identification of responsibilities and authorities through the internal system and job descriptions.

Hazard Analysis and Critical Control Point (HACCP)

In the 30 years since its conception, the HACCP system has grown to become the universally recognized and accepted method for food safety assurance. The recent and growing concerns about food safety from public health authorities, the food industry and consumers worldwide have been the major impetus in the application of the HACCP system, so the World Health Organization has recognized the importance of the HACCP system for prevention of food-borne diseases for over 20 years and has played an important role in its development and promotion.

HACCP is a system in which food safety is addressed through the analysis and control of biological, chemical and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product.

ISO 22000-2005 Food Safety Management System

ISO 22000 is a standard developed by ISO for managing food safety systems along the supply chain. It defines the requirements of the Food Safety Management System, which is the system covering all organizations working in the food chain 'from farm to fork'. The standard combines generally recognized key elements to ensure food safety along the food chain, including:

- Interactive communication;
- System management;
- Control of food safety hazards through prerequisite programmes and HACCP plans;
- Continual improvement and updating of the food safety management system.

While HACCP and ISO 22000 are both food safety certifications, ISO 22000 incorporates the HACCP principles. While ISO 22000 certified companies comply with HACCP requirements by default, companies can be HACCP certified only. In other words ISO 22000 consists of elements of a management system such as interactive communication, system management, prerequisite programmes (such as GHP and GMP) and HACCP principles. Codex HACCP is a guidance document and cannot be directly used for certification, while HACCP certification is possible against a national standard (i.e. Dutch HACCP).

GMP

GMP is defined as 'that part of Quality Assurance which ensures that products are consistently produced and controlled to the quality standards appropriate to their intended use'. The principles and guidelines for GMP are stated in two directives: Directive 2003/94/EC for medicinal products and investigational medicinal products for human use, and Directive 91/412/EEC concerning veterinary medicinal products. Compliance with these principles and guidelines is mandatory within the European Economic Area. The application of GMP provides for a system of processes, procedures and documentation to assure a product has the identity, strength, composition, quality and purity that it is represented to possess.

Detailed guidelines in the form of GMP provide interpretation of the principles and guidelines, and these in turn are supplemented by a series of Appendices which modify or augment the detailed guidelines for certain types of product, or provide more specific guidance on a particular topic. They are developed by the GMP inspection services group and are published by the European Commission as Volume 4 of 'The rules governing medicinal products in the European Union'.

GAP

GAPs are defined as 'practices that address environmental, economic and social sustainability for on-farm processes, and result in safe and quality food and non-food agricultural products.'^{*} GAP guidelines have been developed by a variety of organizations including governments, NGOs, the food industry and producer organizations. While some of these practices are designed to provide a framework for compliance with trade and government regulatory requirements dealing with food safety and quality, others cater to niche and specialty markets. The adoption of such principles can help reduce the risk of contamination, diminish the risk of noncompliance with standards, and promote ecologically sustainable practices.

While the many guidelines vary to some degree, in general GAP production and postharvest guidelines are designed to reduce the hazard of food-borne illness and disease at the farm level by focusing on the main sources of risk: soil, water, hands and surfaces.^{**}

GHP

GHP guidelines provide for a set of systems and processes that ensure food safety and quality throughout the production process, and they serve as a prerequisite for the implementation of HACCP systems. While GAPs are focused on the farm level, GHPs have a broader reach and are especially important during stages of agro-processing. As they ensure 'the basic environmental and operating conditions for production of safe food,' GHPs have long played an important role in food safety and quality management.^{***}

GHPs address all potential sources of hygienic risk. As such, they describe the 'conditions, measures and controls, building[s], facilities, equipment, personnel, process, storage, distribution and environment required for production of wholesome food for human consumption.'^{****}

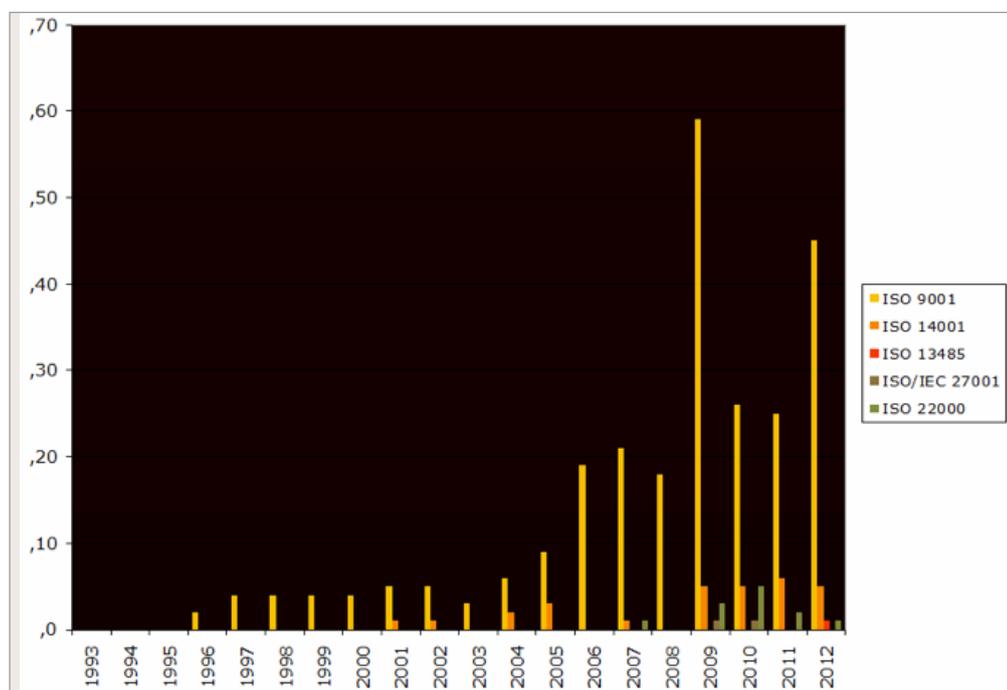
* FAO (2008). Good Agricultural Practices. Available from <http://www.fao.org/prods/gap/>.

** University of Kentucky, College of Agriculture: Cooperative Extension Service (2012). Good Agricultural Practices (GAP). Available from <http://www.uky.edu/Ag/CCD/introsheets/gap.pdf>.

*** FAO (2004). *Assessment and Management of Seafood Safety and Quality*. FAO Fisheries Technical Paper 444. Rome.

**** Ministry of Health Malaysia & Japan International Cooperation Agency (2002). *Guidelines on Good Hygiene Practices for Small and Medium Scale Food Industries Towards HACCP*.

Figure 2: ISO certification in Myanmar



Source: ISO (2013). ISO Survey: evolution of ISO 9001 certificates in Myanmar. Available from <http://www.iso.org/iso/home/standards/certification/home/standards/certification/iso-survey.htm?certificate=ISO>.

Myanmar's companies still lag behind their competitors in terms of certification to international standards. At the moment, there are only 259 companies certified ISO 9001 (QM), 29 certified ISO 14001 (environmental management) and only 12 certified ISO 22000 (food safety management).³⁶ As indicated by figure 2, there has been a rapid rise in companies with ISO certification since 2005.

Accreditation

Accreditation refers to the recognition of technical competence, and accredited bodies are recognized as being capable of issuing reliable certification services. The international recognition of national accreditation schemes is promoted by the International Accreditation Forum and the International Laboratory Accreditation Cooperation (certification bodies and laboratories respectively).

Accreditation capacities in Myanmar are currently non-existent. There is no NAB capable of accrediting laboratories or product certification, and no process certification bodies.³⁷ However, the new Standards Law does foresee the

establishment of a NAB under the authority of MSTRD. In the absence of a NAB, testing labs and certification bodies in Myanmar could access services from accreditation bodies in the region who are members of the International Laboratory Accreditation Cooperation and signatories of MRAs, and members of the International Accreditation Forum and signatories of Multilateral Agreements. Therefore, before the establishment of a NAB, MSTRD proposes to establish a National Accreditation Focal Point (NAFP) to facilitate liaison with other accreditation bodies and fulfil some of the functions of a NAB. The NAFP will establish cooperation links with established accreditation bodies recognized by international MRAs,³⁸ such as the Thai National Accreditation Committee.

Testing

The purpose of testing is to verify the compliance of products with technical requirements. Whether public or private, testing laboratories should be accredited to ISO/IEC 17025 to demonstrate their technical competence.³⁹

36. ISO (2013). ISO Survey: evolution of ISO 9001 certificates in Myanmar. Available from: <http://www.iso.org/iso/home/standards/certification/home/standards/certification/iso-survey.htm?certificate=ISO9001&countrycode=MM#countrypick>.

37. NES QM initial assessment questionnaire completed by San San Win, team coordinator.

38. Win, Dr. P.P. (MSTRD). Current Status of Quality Management Infrastructure in Myanmar. ESCAP presentation.

39. ITC (2011). *Export Quality Management: A Guide for Small and Medium-Sized Exporters, Second Edition*. Geneva.



Compared with standards and metrology services, testing capacities in Myanmar are relatively more developed, and investment in testing capacities has even resulted in the application of certain international standards.⁴⁰ For instance, the laboratory of the DoF is accredited ISO/IEC 17025. While it is currently the only one in Myanmar, enhanced aptitude testing of laboratory technicians could lead to other laboratories receiving this important accreditation. Alternatively, it has been noted that there is weak formal coordination between various government departments with regard to the provision of testing and certification services to reduce over-capacity; to lessen the strain on scarce resources; and to enhance the long-term sustainability of services.

A number of ministries maintain laboratories and are involved in compliance and safety testing. The FDA laboratory unit, for example, is capable of performing micro and chemical analysis for water and food. The Ministry of Agriculture and Irrigation (MoAI) maintains a laboratory for analysing pesticides and mycotoxins while at the same time engaging in crop production research and development, and fumigation certification.⁴¹

MoC provides laboratory testing of food grains and product testing analysis related to chemical composition, pesticides and aflatoxins through Myanmar Agricultural Produce Trading. It also operates MITS, which has been certified with ISO 9001-2008 since 2012. MITS performs a number of services, including pre-shipment inspection

of export commodities, inspection of import commodities, sampling lab testing, fumigation services, and a variety of micro, chemical, and quality analyses.⁴² In performing these analyses, MITS uses the laboratories of other organizations, including the Plant Biotechnology Lab of the Ministry of Agriculture.

In addition, the DoF laboratory tests for microbiological and chemical analysis.⁴³ The Ministry of Cooperatives meanwhile operates a laboratory conducting tests for micro and cottage industries.⁴⁴ Lastly, the Ministry of Industry is responsible for licensing all establishments involved in food manufacturing. As such, it operates a food control laboratory.

These government institutions are supported by the private Food Industries Development Supporting Laboratory (FIDSL), which was established in January 2011 under the Myanmar Food Processors and Exporters Association.⁴⁵ This laboratory conducts a number of quality and safety analyses on food and water.

Table 2 details the quality services currently offered by private sector companies in Myanmar.

40. *Ibid.*

41. *Ibid.*

42. Wai Yee Lin & Masahiro Yamao (2012). An Assessment of Food Control System and Development Perspective: The Case of Myanmar. *International Science Index*, vol. 6, No. 9 (26 September). World Academy of Science, Engineering and Technology.

43. *Ibid.*, p. 13.

44. *Ibid.*, p. 27.

45. *Ibid.*, pp. 10–11.

Table 2: Quality services provided by the private sector in Myanmar

Private sector			
Institution	Quality-related services	Institution	Quality-related services
Myanmar Inspection & Testing Services Ltd	<ul style="list-style-type: none"> • Pre-shipment inspection for export commodities • Inspection of import commodities before shipment and at the destination • Sampling for lab testing • Fumigation services 	Overseas Merchandise Inspection Co., Ltd	<ul style="list-style-type: none"> • Agri-products inspection • Marine insurance and technical services • Laboratory testing • Fumigation and pest control services • Quality and quantity for oil, gas & chemicals
Myanmar Agro Inspection & Fumigation Co., Ltd	<ul style="list-style-type: none"> • Fumigation • Pre-shipment inspection • Agri-products inspection 	Mahar Inspection & Services Co., Ltd	<ul style="list-style-type: none"> • Pre-shipment inspection • Agri-products inspection • Pest control services
Société Générale de Surveillance (Myanmar) Ltd	<ul style="list-style-type: none"> • Agri-inspection • Marine inspection • Mineral inspection • Timber inspection • Consumer testing • Fumigation • Oil, gas & chemical • System & services • Certification • Draft surveys • Collateral management • Stock management 	Asia Pacific Inspection Agency Ltd	<ul style="list-style-type: none"> • Pre-shipment inspection • Destination survey • Pre-production raw material inspection • Loading/unloading supervision • Garment inspection • Trans-shipment inspection audit • Sawn timber & logs • Weight ascertainment • Fumigation services
United General Inspection	<ul style="list-style-type: none"> • Fumigation • Pre-shipment inspection • Agri-products inspection 	Quality Services Ltd	<ul style="list-style-type: none"> • Specializes in inspection of crude oil, gas and petroleum products
Global Greatness Co., Ltd	<ul style="list-style-type: none"> • For ISO, HACCP • Accredited certification laboratory standard 	General Inspection & Pest Testing Enterprise Ltd (GITE Pest Control)	<ul style="list-style-type: none"> • Pre-shipment quality, quantity and weight inspection • Agri-products inspection • Fumigation
Myanmar Overseas Commodity Inspection Co., Ltd	<ul style="list-style-type: none"> • Pre-shipment quality and weight inspection • Agri-product inspection and analysis • Fumigation 	MOCIC (Hong Kong GF Ltd)	<ul style="list-style-type: none"> • Consulting and garment inspection centre
Myanmar Food Processors and Exporters Association	<ul style="list-style-type: none"> • FIDSL 		

Source: San San Win, quality strategy team coordinator.

Even with the presence of numerous public and private quality services, capacities must be enhanced, especially with regards to food production and processing,⁴⁶ if

Myanmar is to expand and diversify its exports in line with the government's development goals.

46. Wai Yee Lin & Masahiro Yamao (2012). An Assessment of Food Control System and Development Perspective: The Case of Myanmar. *International Science Index*, vol. 6, No. 9 (26 September), p. 756. World Academy of Science, Engineering and Technology.

THE INSTITUTIONAL PERSPECTIVE

TSIs are institutions that have an interest in, and bearing on, the cross-sector's export development. Broadly, the TSIs providing important services to Myanmar's quality cross-sector can be categorized in the following support areas:

- Policy support network
- Trade services network
- Business support network
- Civil society network.

Tables 3 to 6 identify the main TSIs whose service delivery affects the QM framework in Myanmar. An assessment of the TSIs along four key dimensions – coordination, human capital, financial sustainability and advocacy – is provided. The ranking (high/medium/low) for each TSI was selected in the context of service delivery of the TSI relative to the cross-sector. In other words, the assessment was conducted based on stakeholders' evaluation of TSIs from the perspective of how well they serve quality stakeholders.

POLICY SUPPORT NETWORK

These institutions represent ministries and competent authorities responsible for influencing or implementing policies at the national level.

Table 3: Evaluation of performance for institutions of Myanmar's quality policy support network

Name of institution	Unit/institution	Description of TSI and services provided	Coordination	Human capital	Financial sustainability	Communication/advocacy
MoAI	Department of Agriculture	<ul style="list-style-type: none"> • Educates crop growers about the correct practices and preventive measures in cases of pest and disease incidence in crops. 	M	M	M	L
	Plant Protection Lab	<ul style="list-style-type: none"> • Quarantines exotic plant pests and diseases from other countries; • Inspection and quarantine of exotic pests and diseases at the country's entry checkpoints; • Laboratory testing of maximum residue limits of pesticides included in crop produce; • Provides services for the prevention of storage pests; • Issues phytosanitary certificates for exports of agricultural products after inspection; • International Plant Protection Convention focal point. 	M	M	L	M
	Plant Biotechnology Lab	<ul style="list-style-type: none"> • Registration of importation of pesticides which are allowed to be used for the control of plant pests and diseases; • Issues Genetically Modified Organism certificates. 	M	M	L	M

Name of institution	Unit/institution	Description of TSI and services provided	Coordination	Human capital	Financial sustainability	Communication/ advocacy
Ministry of Science and Technology	MSTRD	<ul style="list-style-type: none"> Standards laws (NSB); Establishes quality policy; Calibration of weights and measures, equipment and machinery to the inspection teams for standardization; NMI; Drafting of legal metrology law; NAFP. 	M	M	L	L
	Department of Atomic Energy	<ul style="list-style-type: none"> Radiation certificates. 	L	L	L	L
	Central Lab	<ul style="list-style-type: none"> Chemical properties certificates. 	L	L	L	L
MoH	FDA	<ul style="list-style-type: none"> Issues health recommendations for local food manufacturing compliance with GMP and GHP, imported foods and foods to be exported; Pre-market control and post-market surveillance are conducted to assess quality and safety of food and drugs; Codex focal point. 	M	M	L	M
MoC	Department of Commerce and Consumer Affairs (DCCA)	<ul style="list-style-type: none"> Focal point of ASEAN Committee on Consumer Protection; Provides capacity-building training for human resource development; International trade advanced course. 	M	M	M	M
	Postharvest Technology Application Centre (PTAC) Commodity Testing & Quality Management (CTQM)	<ul style="list-style-type: none"> Provides quality assurance to exported food grains; Physical properties; Chemical composition; Hydrogen Cyanide content in beans (especially in butter beans); Issues pesticide residues certificates; Issue aflatoxin contamination certificates; Analysis and test results of fats & oils certificates; Carries out training activities on postharvest practices. 	M	M	L	L

Name of institution	Unit/institution	Description of TSI and services provided	Coordination	Human capital	Financial sustainability	Communication/advocacy
Ministry of National Planning and Economic Development (MoNPED)	National Planning Department	<ul style="list-style-type: none"> Short-term, medium-term and long-term development planning. 	M	M	M	M
Ministry of Finance and Revenue (MoFR)	Customs Department	<ul style="list-style-type: none"> Inspection of export and import items as per quality standard and certification documents. 	M	M	M	L
	Internal Revenue Department	<ul style="list-style-type: none"> Determining commercial tax and income tax on business activities of import and export commodities; Collection of tax revenue. 	M	M	M	L
Ministry of Cooperatives	Cooperative Lab	<ul style="list-style-type: none"> Chemical properties analysis. 	M	L	L	M
Ministry of Industry	Development Centre for Pharmaceuticals and Foodstuffs Lab	<ul style="list-style-type: none"> Chemical properties certificates for foods and pharmaceuticals. 	M	M	M	L
Ministry of Construction	Road Research Lab	<ul style="list-style-type: none"> Test results for bitumen & cement. 	M	M	M	M
MoLFRD	DoF Lab	<ul style="list-style-type: none"> Inspection and testing for quality control procedures along the production process of fisheries products and value added fisheries products to export; Quality, safety and hygiene testing; ISO certified 17025; Fit for Human Consumption certificates; Recognized competent authority for export of fisheries product to the European Union (EU). 	H	H	H	H

TRADE SERVICES NETWORK

These institutions or agencies provide a wide range of trade-related services to both government and enterprises. These institutions support and promote sectors and are concerned with the delivery of trade and export solutions within a developing country.

Table 4: Evaluation of performance for institutions in Myanmar's quality trade services network

Name of institution	Description of TSI and services provided	Coordination	Human capital	Financial sustainability	Communication/ advocacy
MITS	<ul style="list-style-type: none"> • Function: • Inspection and verification of commodities for exports and imports. • Services provided: • Pre-shipment inspection for export commodities; • Inspection of import commodities before shipment and at the destination; • Sampling for lab testing; • Fumigation service at warehouses, containers and on board for agricultural products such as rice, pulses and beans, and oil-bearing seeds. 	M	M	M	M
FIDSL at the Myanmar Food Processors and Exporters Association	<ul style="list-style-type: none"> • Testing the chemical properties of foods; • Microbiology tests for foods; • Gives training about food safety for food products; • Self-certification and voluntary certification for the (future) development of a local quality mark for the local market. 	M	M	M	M

BUSINESS SERVICES NETWORK

These are associations, or major representatives, of commercial services providers used by exporters to effect international trade transactions.

Table 5: Evaluation of performance for institutions in Myanmar's quality business services network.

Name of institution	Description of TSI and services provided	Coordination	Human capital	Financial sustainability	Communication/ advocacy
Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI) and sector associations	<ul style="list-style-type: none"> • Collect and disseminate quality information to their members. 	M	M	M	M
Freight forwarders association and truckers associations	<ul style="list-style-type: none"> • Cold chain management. 	L	L	L	L

Table 6: Evaluation of performance for institutions in Myanmar's quality civil society network

Name of institution	Description of TSI in line with sector	Coordination	Human capital	Financial sustainability	Communication/ advocacy
Universities	<ul style="list-style-type: none"> Provide technical and best practice training. 	L	L	L	L
Consumer protection associations	<ul style="list-style-type: none"> Lobby for the protection of consumers and act as a dialogue partner between consumers, enterprises and government. 	M	L	L	M

CIVIL SOCIETY NETWORK

ANALYSIS OF THE TRADE SUPPORT NETWORK

These institutions are not explicitly engaged in the sector's trade-related activities. However, they are opinion-leaders representing specific interests that have a bearing on the sector's export potential and socioeconomic development.

The implementation of the present strategy, as well as the new quality policy, will largely rely on the capacities of institutions involved in the quality function. Hence, a clear case exists for investing in building the human and financial capacity of these institutions as well as encouraging enhanced coordination between them.

The Department of Commercial Affairs & Consumer Protection, the FDA, the DoF lab, FIDSL, UMFCCI and the consumer protection associations are institutions that can build up the outreach of the quality function through their adequate advocacy and communication capacities (through trainings and awareness-raising initiatives). According to the assessment, most institutions also have some human and financial resources to promote QM to private sector enterprises.

Financial sustainability is another bottleneck that hinders key institutions of the quality function from developing a sustainable and sound quality infrastructure in Myanmar; most of these governmental departments and some associations do not have adequate funding mechanisms for any medium-to-long-term national quality vision. As part of the building of the QM infrastructure it will be essential for the central government to assess options to build up the financial autonomy of these institutions.

Within the TSN, the vast majority of institutions have adequate levels of human capacity due to the high number of staff in Ministry departments, as well as numerous staff with advanced degrees in laboratories. It has been pointed out that the staff capacities exist but that training is required to build knowledge about modern international laboratory and management systems.



Coordination levels appear to be on the low to medium scale, indicating that increased efforts will be required to ensure synergies of actions between the different partners of the quality function. There is a need for a comprehensive framework structuring all efforts aimed at enhancing the quality infrastructure, where responsibilities, accountabilities and consulting roles are clearly defined and intervention outcomes are properly tracked and measured.

PERCEPTION OF MYANMAR TSIS IN THE QUALITY SECTOR – INFLUENCE VS. CAPABILITY

Table 7 reflects the perception of stakeholders regarding the level of influence and capacity pertaining to the institutions of the quality system.

Table 7: Perception of Myanmar's quality TSIs – influence versus capacities

		Capacity of institution to respond to the cross-sector's needs	
		Low	High
Level of influence on the cross-sector	High	<ul style="list-style-type: none"> • Department of Agriculture • Plant Protection Lab • MSTRD • FDA • PTAC/CTQM • Freight forwarders/truckers associations • Consumer protection associations 	<ul style="list-style-type: none"> • Department of Commercial Affairs & Consumer Protection • DoF lab • MITS
	Low	<ul style="list-style-type: none"> • Plant Biotechnology Lab • Department of Atomic Energy • Central Lab • Cooperative Lab • Development Centre for Pharmaceuticals and Foodstuffs Lab • Customs Department • Internal Revenue Department • Road Research Lab 	<ul style="list-style-type: none"> • National Planning Department • FIDSL • UMFCCI • Universities

The perception analysis indicates that many institutions are perceived to have a low level of influence combined with a low level of capacity, including key laboratories such as the Central Lab, Cooperative Lab and the Plant Biotechnology Lab. The low/low combination for these laboratories and some other institutions is problematic given that a large number of sector stakeholders depend on them for services and guidance, and that they are critical for shaping their export performance.

On the capacity side, it can be noted that most of the key institutions exhibit a low level of capacity to respond to sector needs. Service delivery to institutions and enterprises seeking QM services is limited as a consequence. This is especially relevant in the case of institutions whose mandate provides them with a high degree of influence over the function. The building of these institutions' capacities is particularly important as it will influence their capacity not only to respond to enterprises' needs but also to implement key activities of this strategy. Institutions such as the Department of Agriculture, the Plant Protection Lab, MSTRD, FDA, PTAC/CTQM and consumer protection associations should undergo special programmes to enhance their capacity in many areas, especially human capital, to enable them to respond to sector needs faster.

Enhancing influence is typically the result of proper delegation of responsibilities combined with advocacy building. While very few institutions have high influence levels, there is a need to empower many more institutions to optimize the building up of the function. This can be achieved by delegating more responsibilities to these institutions and by creating clear mechanisms for carrying out the workload. Efficiency of the quality technical infrastructure will also be defined by a clear demarcation of roles and responsibilities.

DEVELOPMENT INITIATIVES

While technical assistance is needed across a variety of fronts in the quality space, Myanmar's NQI has thus far been the subject of limited donor activity. Only a few projects geared at improving the quality framework have been implemented recently. A first project was led by New Zealand in 2007 to assist the government in the drafting of the new Standards and Metrology Laws that are expected to align the legislative framework with modern standards.⁴⁷ However, little information is available regarding the specific details of the assistance.

At the moment, a number of new projects are being designed to strengthen the quality infrastructure in Myanmar. Initiatives are being developed by the EU, the German metrology institute Physikalisch-Technische Bundesanstalt (PTB) and UNIDO.

UNIDO's Strengthening National Quality Infrastructure for Trade project (2012 to 2015),⁴⁸ which has received a EUR 2 million commitment from the Norwegian Agency for Development Cooperation, has produced a preparatory needs assessment that is being formulated into a project document. Its goal is to 'facilitate the process of Myanmar's integration into the international trade system through strengthening institutional Standards, Metrology, Testing, and Quality capacities,' thereby promoting increased trade and the advancement of long-term industrial development.⁴⁹

47. UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, p. 2.

48. *Ibid.*, pp. 1–2.

49. *Ibid.*

In an effort to improve the quality cross-sector, the main project outputs are:

1. NQI long-term strategy and vision developed: NQI master plan for holistic development;
2. Strengthened capacities related to Standards, Metrology, Testing and Quality;
3. Established and upgraded laboratories to support the competitiveness of priority sectors; and
4. Established product certification schemes and management systems certification body to obtain international recognition.⁵⁰

Intermediate outputs of the preparatory phase include the production of an elaborated project document and the adoption of a national quality policy by the government. Specific goals include enhancing the capacities of testing laboratories; increasing the adoption of food safety risk management standards by food processing enterprises; improving capacities in various areas of standardization; facilitating NQI planning; and bolstering the capacities of inspection and certification bodies. The UNIDO project has the potential to address many of the actions identified in the PoA of the strategy.

The PTB project “strengthening quality infrastructure in Myanmar” (2014-2018) has set itself the goal to improve the availability and usage of QI services which are based on international good practices. The project has its main outputs in the areas of a) strategy development, b) metrology, c) QI services and d) stakeholder engagement & awareness. It assists in developing strategies and policies for the establishment of a demand-oriented national QI, in establishing a basic national metrology system providing metrological traceability to testing laboratories and industry, in enhancing reliable and relevant QI services used by stakeholders from the private and the public sector (in particular in the agricultural sector), and in increasing the level of awareness about the significance of QI leading to a higher demand for relevant services by industries, regulators, and consumers.

LEGAL AND LEGISLATIVE FRAMEWORK

The legal framework for standardization and metrology in Myanmar is severely outdated. Current legislation includes:

- The Measurement Basket Standardization Act (Burma Act 1, 1939);
- The Burma Municipal Act (1898);
- The Burma Rural Self-Government Act (1921);
- The City of Rangoon Municipal Act (1922);

50. *Ibid.*

- The Weights and Measures of Capacity Act (India Act 31, 1871); and
- The Measures of Length Act (India Act 2, 1889).⁵¹

In addition to being dated, and therefore unaligned with modern standards, these acts are underdeveloped in that they do not deal with enforcement measures.

Despite these deficiencies, the new quality policy is expected to modernize the legislative framework through the introduction of the Metrology Law.⁵² The draft Metrology Law was developed with the help of New Zealand and modelled after the National Metrological System Development Act (1997) and the Law of Weights and Measures (1993) of Thailand. While the draft is unavailable for consultation, it is understood to call for the creation of an NMI whose duties will include the registration, verification and inspection of measuring instruments used for transactions.

The SD currently carries out the design and adoption of national standards and technical regulations. However, the majority of standards are outdated and unaligned to international standards. Moreover, developing the required updates is a slow process that is further hampered by limited human resource capacities in the SD. In addition, a lack of private sector participation has thus far limited the ability of authorities to devise standards that are aligned to the needs of exporting enterprises.

As indicated previously, the responsibilities of the SD will be expanded upon and formalized through the new Standards Law.⁵³ As such, it will be responsible for the preparation of national standards and assessment measures, and the harmonization of national standards to international standards. Parts of this law have also already established a Standards Committee charged with developing sector-specific standards. Moreover, the law granted responsible ministries the task of drafting technical regulations and SPS measures for their areas of competency.

The basis for food safety legislation is found in the National Food Law of 1997. The Myanmar Food & Drug Board of Authority, chaired by MoH and comprised of both Ministry representatives and experts, is responsible for establishing policy and guidelines with respect to ‘production, distribution, importation, exportation, quality assurance, standard setting, classifying controlled food, food additives, and substandard foods, labelling and advertisement.’⁵⁴

51. UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, pp. 1–2.

52. *Ibid.*, p. 2.

53. *Ibid.*

54. Wai Yee Lin & Masahiro Yamao (2012). An Assessment of Food Control System and Development Perspective: The Case of Myanmar. *International Science Index*, vol. 6, No. 9 (26 September), p. 752. World Academy of Science, Engineering and Technology.

Box 5: SPS framework

SPS measures are designed to protect human, animal, and plant health by mitigating the dangers associated with pests, diseases, disease carrying and causing organisms, toxins, additives, and contaminants.* While such measures may take many forms, common applications include:

'Requiring animals and animal products to come from disease-free areas; inspection of products for microbiological contaminants; mandating a specific fumigation treatment for products; and setting maximum allowable levels of pesticide residues in food.'**

As such, the absence of an adequate SPS framework often acts as a TBT for developing countries wishing to export agricultural and food products to more advanced economies. The absence of an efficient SPS system also makes it challenging to control imports and avoid entry of pests and diseases that may hamper the Myanmar agricultural sector.

Myanmar's SPS framework is currently lacking in a number of areas. The Plant Protection Division of MoAI issues phytosanitary certificates for agri-export products. In addition, relevant certificates are issued for imported products according to the Plant Pest Quarantine Laws of 1993.*** It should be noted, however, that according to one study, unacceptable traces of plant growth regulator residues were found in products circulating the domestic market.**** Such results are evidence of weak testing capacities. While the Plant Protection Division does have the capacity to monitor for pesticides, better implementation of both international and regional SPS measures are hindered by limited finances and inadequate infrastructure.*****

Moreover, legislation and monitoring are considered to be insufficient, and the lack of traceability capacities and low awareness on the part of producers both make effective SPS implementation difficult. While the draft Standards Law will address the legislative framework by empowering ministries to create SPS measures for their areas of expertise, a modern SPS framework will necessitate more investment and enhanced awareness, monitoring, traceability and laboratory capacities.

* WTO (2013). SPS agreement training module, chapter 1: Introduction to the SPS agreement: What is an SPS measure? Available from http://www.wto.org/english/tratop_e/sps_e/sps_agreement_cbt_e/c1s3p1_e.htm.

** Ibid.

*** Wai Yee Lin & Masahiro Yamao (2012). An Assessment of Food Control System and Development Perspective: The Case of Myanmar. International Science Index, vol. 6, No. 9 (26 September), p. 752. World Academy of Science, Engineering and Technology.

**** Ibid.

***** Ibid.

Also important to the SPS framework are four legal acts covering different areas of animal and plant health: the Veterinary Committee Law of Myanmar; the Plant Pest Quarantine Law; the Animal Health and Development Law; and the Pesticide Law. Each of these acts establishes the legal and regulatory mechanisms governing the area of their respective purview.



Box 6: Laws governing plant and animal health in Myanmar

Law	Objective
Veterinary Committee Law of Myanmar (1995)	<ol style="list-style-type: none"> 1. 'To carry out effectively animal health and development works by the Veterinary Surgeons and Veterinary Auxiliaries collectively; 2. To cause the Veterinary Surgeons and Veterinary Auxiliaries to abide by and maintain the ethics and discipline relating to them; 3. To contribute towards the instruction and modernization of Veterinary Science; 4. To tender advice on the development of livestock breeding and Veterinary works; 5. To carry out animal health and development works in co-operation with the relevant Government departments and organizations.' *
Plant Pest Quarantine Law (1993)	<ol style="list-style-type: none"> 1. 'To prevent quarantine pests from entering into Myanmar by any means; 2. To suppress effectively the spread of quarantine pests; 3. To carry out, if necessary, disinfestation, disinfection treatment of plant or plant product to be exported and the issuance of phytosanitary certificate.' **
Animal Health and Development Law (1993)	<ol style="list-style-type: none"> 1. 'To carry out animal health and development work; 2. To promote livestock development; 3. To prevent outbreak of contagious disease in animals and to control the outbreak systematically when it occurs; 4. To inspect imported animal, animal product and animal feed; 5. To issue recommendation certificate concerning animal, animal product and animal feed for export; 6. To protect animals by law from being ill-treated.' ***
Pesticide Law (1990)	<ol style="list-style-type: none"> 1. 'To regulate the registration and use of pesticides in Myanmar'. **** The Pesticide Registration Board was established as a result of this law, constituting ten authorities from various ministries

* Myanmar State Law and Order Restoration Committee (1995). The Veterinary Committee Law (Law No 9/95).

** Myanmar State Law and Order Restoration Committee (1993). The Plant Pest Quarantine Law (Law No. 8/1993).

*** Myanmar State Law and Order Restoration Committee (1993). The Animal Health and Development Law (Law No. 17/93).

**** U Myo Myint (Plant Protection Division, Myanmar Agriculture Service). Myanmar Country Report.

With regards to consumers, MoC has been involved in consumer protection activities since 2007. It recently proposed to the Attorney General a Consumer Protection Law which is to be adopted soon. MoC is also preparing to carry out a consumer redress scheme and promotion of consumer awareness.⁵⁵

REGULATORY ENVIRONMENT

Within an NQI framework, regulatory authorities are responsible for legislation related to food safety, industrial, non-sanitary and SPS issues of agricultural goods; animal and plant health; and compliance oversight of domestic products and imports. As such, they fulfil a key role in

55. *Ibid*, p. 756.

ensuring the quality of goods and commodities destined for both domestic consumption and export.

The groundwork for the modern regulatory framework was laid with the formation of the Myanmar Food and Drug Board of Authority, authorized by the National Drug Law of 1992.⁵⁶ In 1997, the National Food Law granted the FDA (under MoH) authority to ensure compliance with food safety legislation.⁵⁷ This act empowered the FDA to '[supervise] control and regulate the production, import, export, storage, distribution and sale of food systemati-

56. Republic of the Union of Myanmar, Ministry of Health (2013). Health and Health Related Laws. Available from <http://www.moh.gov.mm/Law.htm>. Accessed 27 November 2013.

57. UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, pp. 19-20.

cally' in order to guarantee the quality, safety, and hygiene of food products.⁵⁸ According to the National Food Law, all foods being imported into Myanmar must be certified with a health certificate by the FDA.⁵⁹ When analysing

58. Myanmar State Law and Order Restoration Committee (1997). *National Food Law (Law No. 5/97)*.

59. Wai Yee Lin & Masahiro Yamao (2012). An Assessment of Food Control System and Development Perspective: The Case of Myanmar. *International Science Index*, vol. 6, No. 9 (26 September). World Academy of Science, Engineering and Technology.

imports, the FDA assesses documents regarding GHP of the manufacturing plants, including those that shed light on factory registration and product specifications, and analysis certificates. In addition, it will analyse the imported food to ensure compliance with standards or technical regulations/SPS measures. However, controls are not very strict as a result of limited staffing and capacities. With regards to exports, the FDA attempts, where possible, to facilitate the requests of the importing countries by issuing export health certificates: fit for human consumption, etc.

Box 7: Regulation under the FDA

The FDA is comprised of two divisions; the Food Division and the Drug Division. Each has access to its own laboratory and is responsible for enforcing activities under their specific purview. The Food Division inspects food processing units and issues both recommendations and certificates. These certificates are required for an enterprise to register as a business with the Ministry of Industry and engage in food processing. The FDA also engages in pre-market controls and post-market surveillance in order to guarantee compliance, and to date it has accredited nearly 3,000 enterprises in Good Manufacturing Practices (GMP), valid for two years, and Good Hygiene Practice (GHP), valid for one year. It should be noted that although HACCP is recommended, it is not mandatory in Myanmar.

The FDA is understaffed, and its 100 employees are not considered sufficient to monitor the whole country. Some officials estimate that roughly 2,000 employees are required for effective implementation of FDA mandates.¹⁵ In addition to staffing problems, inspections are not risk-based.

Sources: UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, pp. 19-20; Wai Yee Lin & Masahiro Yamao (2012). An Assessment of Food Control System and Development Perspective: The Case of Myanmar. *International Science Index*, vol. 6, No. 9 (26 September), p. 752. World Academy of Science, Engineering and Technology.

Regulation of fishery products, an important source of both food and economic activity, was governed by the Fisheries Law of 1905, which was amended in 1954.⁶⁰ This law was repealed in 1989 with the passage of the Law Relating to the Fishing Rights of Foreign Vessels in 1989. The Aquaculture Fisheries Law (1989), Myanmar Marine Fisheries Law (1990), and Freshwater Fisheries Law (1991) replaced the old legal framework and empowered the DoF, and in particular its Fish Inspection and Quality Control Division (FIQCD), with oversight authority of fish production.

60. FAO (2006). Fishery Country Profile: Myanmar. Available from <http://www.fao.org/fi/oldsite/FCP/en/MMR/profile.htm>. Accessed 27 November 2013.

A number of directives issued under the authority of the Marine Fisheries Law served to further define the regulatory authority of the DoF. Among other things, these directives defined the structural and procedural requirements by which sector enterprises must operate in order to guarantee safety, quality and hygiene.⁶¹ Directive No. 9/98 established the Myanmar DoF System of Inspection, which issues guidelines on QM documentation and HACCP implementation. All sector enterprises must be graded on their compliance with Myanmar DoF System of Inspection requirements. DoF is the Recognized Competent Authority for export of fisheries products to the EU.

61. FAO Fisheries and Aquaculture Department (2014). National aquaculture legislation overview – Myanmar. Available from http://www.fao.org/fishery/legalframework/nalo_myanmar/en.

Box 8: Regulation under DoF

The FIQCD maintains an ISO/IEC 17025:2005 accredited laboratory and employs 16 inspectors and two assistants. The EU Food and Veterinary Office has determined that the system used by the FIQCD in monitoring fish handling and processing is generally in line with EU requirements. Deficiencies were noted, however, in the capacities of staff, which were capable of effectively monitoring marine fish production but not inland or pond production. Moreover, capacities for monitoring fish and water processing, vessel hygiene, and landing point traceability were deemed inadequate.

Source: UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, p. 21.

With regards to agricultural products, MoAI operates a laboratory capable of analysing pesticides and mycotoxins and providing fumigation certificates. MoAI is also responsible for issuing phytosanitary certificates. MSTRD meanwhile maintains a newly renovated laboratory (National Analytical Laboratory) with the capacity to test for additives and macro and micro nutrients in food. In addition, FIDSL conducts quality and safety tests on food and water under the auspices of the Myanmar Food Processors and Exporters Association.⁶²

The MoC PTAC laboratory is tasked with testing grains and pulses for chemical composition, pesticides and

mycotoxins. Nonetheless, capacities at PTAC are limited, and the inadequacy of its equipment is reflected in its inability to perform pesticide analyses. Under MoC, MITS is accredited to ISO 9001-2008 QM systems and it is charged with providing certificates and verifying the quality of imported and exported agricultural products through a series of pre-export and import inspections, sampling, testing and agro-product fumigation services. It should be noted that MITS does not operate its own laboratory but instead leverages those of other agencies. MITS inspection parameters are based on international standards, commercial trading requirements and specifications, and DoTP/MoC specifications.⁶³

62. UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*, pp. 10-11.

63. *Ibid.*, pp. 16-17.

Table 8: Food products laboratories in Myanmar

No.	Laboratory	Certificate/reports
1	FDA (MoH) (Food Quality Control Laboratory)	Fit for Human Consumption
2	Plant Protection Lab (Department of Agriculture) (MoAI)	Free from Aflatoxin & RAC Certificate Phytosanitary Certificate
3	CTQM (MoC)	RAC Certificate, Hydrogen Cyanide Certificate, Chemical Properties of Food Grains
4	Central Lab (MSTRD)	Chemical Properties Certificate
5	Plant Biotechnology Lab (MoAI)	Genetically Modified Organism Certificate
6	Cooperative Lab (Ministry of Cooperatives)	Chemical Properties Certificate for foods
7	Department Development Centre for Pharmaceuticals and Foodstuffs Lab (Ministry of Industry)	Chemical Properties Certificate for foods and pharmaceuticals
8	FIDSL	Test results on foods

Source: San San Win, Team coordinator, Quality strategy



COMPETITIVENESS CONSTRAINTS

This section identifies the most important constraints affecting the quality function in Myanmar. Constraints are identified along two dimensions – institutional and enterprise.

Policy issues refer to legislative and regulatory issues that currently limit the effective functioning of the cross-sector function in line with international best practice.

Institutional constraints refer to supply-side issues related to the service delivery of TSIs to enterprises, specifically in terms of the capacities and resources available to the institutions for achieving effective service delivery.

Enterprise constraints refer to demand-side issues related to the infrastructure and compliance levels demonstrated by enterprises in terms of QM.

POLICY ISSUES (LEGISLATIVE)

Box 9: Policy issues affecting quality in Myanmar

- The absence of an implemented, unified national quality policy hinders coordination and cross-sector development.
- An inadequate metrology system hinders trade development.
- Outdated standards diminish the relevance of QM compliance and decrease competitiveness.
- The absence of a NAB or NAFP hampers development of the QM function.
- An inadequate number of MRAs inhibits export growth.

THE ABSENCE OF AN IMPLEMENTED, UNIFIED NATIONAL QUALITY POLICY HINDERS COORDINATION AND CROSS-SECTOR DEVELOPMENT

At the moment, a new quality policy has been elaborated in collaboration with UNIDO to structure the QM framework in Myanmar. The initial basic principles of the new policy are the Law on Standardization and the Metrology Law, and establishment and funding of NQI. Unfortunately, this policy and its initial laws are yet to be endorsed by the government. Hence, until the policy is actually rolled out there is no implemented and unified national quality policy that would allow the government to align its legal and institutional framework to ensure QM supports economic development goals.

Delays in implementing the quality policy and building its legal frameworks creates a disharmonized situation and limits the creation of synergies between legal and institutional frameworks to address key issues such as food safety, traceability, export development and consumer protection. The implementation of a coherent policy, with increased efforts at harmonizing laws, regulations and institutional responsibilities, would permit a streamlined implementation of QM systems in Myanmar. Although some advancements have been made, additional efforts are needed to ensure rapid and effective implementation.

AN INADEQUATE METROLOGY SYSTEM HINDERS TRADE DEVELOPMENT

Myanmar's metrology system is severely underdeveloped. The absence of an NMI means that there is no central organization responsible for creating, diffusing and maintaining national measurements. As such, there is no ability to trace measurements, nor is there an authority empowered to verify measurements used in transactions. The relevant legislation is also outdated. There is no legal metrology law – although one is in the draft stage – and no industrial metrology law. Further complicating the matter is that Myanmar has not joined any international conventions on metrology such as the Metre Convention, nor has it adopted the System of International Units.

Technical calibration capacities are severely limited and insufficient. This has led to inadequate maintenance of secondary and reference standards for measurements. It has been estimated that significant investments are required before Myanmar's metrology function is capable of performing reliable calibration services. There is a specific need to invest in increasing the human resources availability to the Metrology Department, as well as increasing their technical capacities.

OUTDATED STANDARDS DIMINISH THE RELEVANCE OF QM COMPLIANCE AND DECREASE COMPETITIVENESS

Authorities in Myanmar have found it difficult to foster a regulatory environment conducive to modern export enhancement. As noted, the majority of standards are outdated, and although the government recognizes the need to update these standards, the processes by which they can be modified are slow. In addition, the authorities on the Standards Committee have little time to review and validate new proposals, while the lack of private sector input hinders the development of more constructive standards. However, the recent establishment of 19 technical committees should facilitate a healthier environment for standards development. These committees will leverage public-private dialogue to facilitate the development of sector-specific standards. As such, they will have a significant impact in ensuring that Myanmar has a suitable framework for efficiently updating standards that are aligned to both international norms and private sector needs.

There is also a general lack of public awareness about standards and standardization due to limited funding for MSTRD to promote itself and the importance of national standards. One result is that outdated standards have not been modernized because there is limited scrutiny from the public and consumer protection associations. Increased funding for development, promotion and monitoring of standards would be needed to raise awareness among enterprises and consumers as a driver for the development of a national quality culture.

Limited cooperation with regional and international standards institutes has hindered the development and application of modern internationally recognized standards. Myanmar is currently only a correspondent member of ISO and IEC.

THE ABSENCE OF A NAB OR NAFF HAMPERS DEVELOPMENT OF THE QM FUNCTION

Countries normally rely on an accreditation body to certify conformity of testing labs, calibration labs, inspection bodies and certification bodies. The approval of the new Standards Law should establish/restructure the key institutions of the NQI in Myanmar and set up of the conformity assessment division of MSTRD to act as the NAFF. Until this law is approved, Myanmar does not have an NAFF that can implement a de facto agreement with an internationally accredited foreign NAB. This implies that it may take many months, even years, before labs, inspection bodies and certification bodies in Myanmar be accredited. It should be noted, however, that such a de facto agreement with a foreign NAB is under negotiation and is expected to be endorsed by the Ministry of Science and Technology.



The setting up of an NAFP is the quickest and simplest way to establish accreditation services in Myanmar and an interim solution before Myanmar has a fully developed NAB. The absence of such a body means that Myanmar is currently unable to accredit its national testing, inspection and certification services to international standards. The NAFP could facilitate access to the services of accreditation bodies in other ASEAN countries in the absence of a NAB. As a result, exporters would face fewer costs to demonstrate compliance with the international requirements of many importing nations, and their ability to assure product quality would also be improved.

AN INADEQUATE NUMBER OF MRAS INHIBITS EXPORT GROWTH

While Myanmar is a signatory to an ASEAN MRA dealing with a limited number of products and services (electronic, electric equipment, accountancy services, etc.), there are numerous products and services that have no MRAs in place. The ASEAN Framework Agreement on Mutual

Recognition Arrangements⁶⁴ provides an adequate model for Myanmar to develop MRAs with other ASEAN countries. The development of these MRAs would fall under the supervision of the NAFP to provide an opportunity for increased intra-regional trade.

Additional MRAs, namely with key destination markets like China, Japan, Australia, the United States, etc. would allow Myanmar to capitalize on foreign demand by harmonizing its regulations and control systems in order to assure production quality. With the strengthening of the NQI, key institutions (NAB, NSB and NMI) would benefit from adherence to MRAs as a means to ensure compliance with international norms. In the past, there has been insufficient attention and support allocated to the development of MRAs. In line with strengthening the QMI, mutual recognition will be important in penetrating and developing markets for exporting enterprises.

64. ASEAN (1998). ASEAN framework agreement on mutual recognition arrangements. Available from <http://www.asean.org/communities/asean-economic-community/item/asean-framework-agreement-on-mutual-recognition-arrangements-2>.

INSTITUTIONAL ISSUES (SUPPLY-SIDE)

Box 10: Institutional issues affecting quality in Myanmar

- Limited laboratory capacities result in inadequate testing services.
- Lack of coordination and resource sharing within the QM framework hinders cross-sector efficiency and development.
- Inadequate border testing leads to unverifiable quality of imports.
- The absence of an effective traceability system results in low buyer confidence and limited market access.
- The lack of qualified trainers/consultants and inspectors for GAqP, GAP, GMP and GHP based on international standards hinders the application of best practices.
- Limited implementation of product surveillance programmes results in uncertain product quality.

LIMITED LABORATORY CAPACITIES RESULT IN INADEQUATE TESTING SERVICES

Enhanced laboratory capacities are necessary for the sustainable development of Myanmar's economy, as they will allow enterprises to better ensure consistent quality and product safety. Not only will this result in superior products capable of catering to more sophisticated markets, but it will also help to instil buyer confidence and enhance exporters' ability to comply with export requirements. The increase in product safety will also directly benefit domestic consumers by reducing the health risks and hazards associated with sub-par production.

Myanmar's insufficient laboratory capacities result from deficiencies in both the public and private sector. With regards to the former, capacities have stagnated as a result of meagre funds for the upgrading of facilities and human resources. Only registered brands are required to test their products for sale in the local market, so there is low demand for laboratory services, thereby reducing revenue flows which could otherwise be reinvested in capacity upgrades. Furthermore, as the Department of Commerce and Consumer Affairs has done little to promote consumer protection, enterprises have little interest in investing in product quality testing. It should be noted that testing services have been increasingly demanded by enterprises since the development of supermarkets in cities from 2006 onwards, as small and medium enterprises are applying for GHPs in order to get more profitable market access and better prices while also providing quality assurance.⁶⁵

With the notable exception of the microbiology and chemical analysis lab of the Ministry of Cooperatives,⁶⁶ all public labs need to send their revenues from testing back to the government. This means that laboratories cannot manage their services and plan their development (or part of) based on their revenue-generating capacities. Laboratories are also unable adjust their prices to reflect actual costs of tests.

While a lack of demand and price flexibility are concerning enough on their own, the lack of adequate funding sources for public labs further impedes capacities. Current budget allocations remain inadequate for labs to access adequate testing machines, chemicals, equipment and human resources, resulting in limited lab service

65. FDA approval becomes necessary because of the demands of supermarkets. This leads to a shift to process-based food control rather than end product testing. See: Wai Yee Lin & Masahiro Yamao (2012). An Assessment of Food Control System and Development Perspective: The Case of Myanmar. *International Science Index*, vol. 6, No. 9 (26 September), p.753. World Academy of Science, Engineering and Technology.

66. The Ministry of Cooperatives only requires 15% of the cost of testing to be refunded to the government. The remaining funds can stay with the lab.

development.⁶⁷ As much as laboratories are needed across Myanmar, there is also an issue of duplication of services between different laboratories and certain gaps in tests not available to enterprises. A possible solution to the limited budget allocation appears to be greater rationalization of services by each public laboratory to provide services not easily provided by the private sector, as well as possible inter-laboratory cooperation for mutualizing of tests.

Private sector testing capacities are similarly diminished by a dearth of funds. As the market for quality testing in Myanmar has historically been quite small, there has been little in the way of funding for the expansion of laboratory capacities and operations.

Complicating the matter of insufficient funding, laboratory capacities are limited by a lack of proficiency testing. Only one laboratory, the ISO 17025 accredited DoF lab, is obliged to perform such tests. Moreover, free proficiency testing schemes available in ASEAN to Myanmar's laboratories are not being fully exploited. The increased use of such tests would allow laboratories to validate their measurement processes in order to ensure testing quality.

Another impediment to the cross-sector is the lack of a network of laboratories that would enable them to pool resources and perform tests jointly. Such a network has been hindered also by the lack of electronic infrastructure to link the labs. Alternatively to a network of laboratories, an independently managed central national lab containing the required testing equipment could contribute to reducing gaps and duplications in testing services.

LACK OF COORDINATION AND RESOURCE SHARING WITHIN THE QM FRAMEWORK HINDERS CROSS-SECTOR EFFICIENCY AND DEVELOPMENT

The smooth functioning of the QM framework through enhanced collaboration is severely hindered by a limited amount of public-private dialogue as well as public-public cooperation. Stakeholders cite the absence of a favourable environment to establish dialogue and enhance cooperation. Key challenges are the time-intensive nature of establishing such dialogue and agreements, as well as a lack of counterparty confidence. A positive development would be to enable a specific committee, such as the TBT or SPS national committees or the Non-Tariff Measures national committee, to act as a coordination mechanism between public and private stakeholders.

67. It should be noted that some charges for the fisheries laboratory are actually met by the private sector.

INADEQUATE BORDER TESTING LEADS TO UNVERIFIABLE QUALITY OF IMPORTS

Poor import testing capacities at the border result in the import of sub-par inputs destined for domestic value chains. The testing of certain types of goods, such as construction materials and steel, is all but absent due to a lack in adequate testing equipment. Further complicating the problem is the lack of rapid test kits that could be easily deployed at border posts for testing a series of goods. A greater issue than the testing of goods is the absence of electricity and electronic systems, as well as proper infrastructures, at numerous border posts, which results in the absence or lack of testing capacities. Additionally, various border posts do not have adequate quarantine services.

While the lack of rapid testing can result in delays at the border, and therefore increase risks and costs for foreign partners and domestic recipients, inadequate testing increases the risk of low-quality inputs. Defective inputs have negative consequences for both the general populace as well as exporters. With respect to manufacturing materials, this could result in structurally unsafe buildings and decreased socioeconomic welfare for Myanmar's population. In agriculture, the import of low-quality (and sometimes illegal) chemical fertilizers, pesticides and insecticides has a negative effect on the safety of producers/consumers as well as on the environment.

THE ABSENCE OF AN EFFECTIVE TRACEABILITY SYSTEM RESULTS IN LOW BUYER CONFIDENCE AND LIMITED MARKET ACCESS

Traceability systems allow authorities to track products both forward and backward in the value chain. Food safety, product tracing and product recalls are worldwide government and industry concerns. Therefore, information (about food, animal and plant health, country of origin etc.) at any point in the chain from producer to consumer has become crucial and needs to be supported by an effective traceability system. Traceability systems range from paper-based record keeping to use of bar coding and radio frequency identification devices. Automatic identification and data capture technologies allow data to be captured at minimal operating cost. While traceability is an important means by which stakeholders can verify product quality and safety, it also allows regulators to identify problem sources and issue and implement product recalls or other corrective actions in the case of goods of sub-par quality and safety.

A number of factors affect the ability of Myanmar's stakeholders to implement effective traceability systems. Chief among them is the limited awareness in both the public and private sectors of the importance of establishing such a system. The limited development of consumer

protection and awareness of quality and food safety issues means little pressure is put on the responsible institutions and stakeholders to develop multi-sectoral product monitoring systems. The new consumer protection law and emerging consumer protection associations will play a vital role in building this awareness.

A key constraint to developing a fully-fledged traceability system in priority sectors of Myanmar is the insufficient knowledge and technical knowhow of QM institutions and enterprises on the design and implementation of tracing systems. This is confirmed by limited availability of information and proper infrastructure to implement a traceability system. It is also difficult for small and medium enterprises to comply with record keeping obligations, and they often have limited resources for setting up traceability systems, which might contribute to a rise in the costs of production. Also, the few efforts that are made remain hampered by a lack of organization and registration of sector stakeholders, which hinders the enforcement of codes of conduct as well as traceability implementation. The development of partnerships with regional and international partners will most probably be required to develop such systems.

The lack of reliable traceability systems impedes Myanmar's trade development, especially with regards to food products. Many target markets and enterprises consider the presence of such systems to be a crucial condition that increases consumer safety and allows for corrective action where necessary. Aside from legal compliance, implementation of traceability systems is increasingly part of commercial negotiations and product or system specifications (e.g. The Global Food Safety Initiative, ISO 9001 and ISO 22000 require traceability systems). As a result, some of Myanmar's priority export sectors are effectively blocked from exporting to certain markets, thereby limiting growth potential. In addition to diminishing export competitiveness, the lack of such systems also has negative consequences for the domestic population's welfare. Without the means with which to verify quality throughout the entire value chain and to recall products in the case of unsanitary or defective goods, Myanmar's authorities are inadequately equipped to protect consumers from health hazards.

THE LACK OF QUALIFIED TRAINERS/CONSULTANTS FOR GAQP, GAP, GMP AND GHP BASED ON INTERNATIONAL STANDARDS HINDERS THE APPLICATION OF BEST PRACTICES

GAP, GAQP, GHP and GMP are designed to ensure that goods and produce are consistently produced according to specific levels of quality and safety standards. Applicable at all stages of production, these systems seek to build the foundation for effective management of

quality and safety. A number of private, public and non-governmental institutions are implementing certain training on these practices. However, Myanmar does not have a qualified supply of trainers for such systems based on international standards. Myanmar's lack of capacities in the application of best practices is further limited by insufficient regional and international cooperation with training institutes. While technical partners could be leveraged to prepare and certify trainers, Myanmar has yet to capitalize on such options.

The limited utilization of international best practice has important effects on Myanmar's exports. Production according to these systems is often a requirement for export to demanding markets, whether explicitly detailed by authorities or implicitly called for by foreign enterprises. As a result, the lack of implementation has thus far limited Myanmar's market expansion potential. Successful export development will, to a large extent, rely on the ability of enterprises to deliver products adhering to consistently high quality standards. The enhanced quality and consistency of production accompanying GAP, GAqP, GHP and GMP compliance will permit Myanmar to improve its brand image, foster long-term relationships with buyers, export to more demanding nations, and develop new products in response to changing market trends.

LIMITED IMPLEMENTATION OF PRODUCT SURVEILLANCE PROGRAMMES RESULTS IN UNCERTAIN PRODUCT QUALITY

Even if capacities were to be upgraded and best practices were to be implemented, the lack of consistent product surveillance reduces the ability of authorities to ensure product quality and safety. While the FDA does perform limited market surveillance, a lack of human resource capacities, together with limited reliance on private sector subcontractors, makes implementation difficult. However, it should be noted that plans for a new organizational structure foresee the introduction of 665 inspectors. However, this remains insufficient given the estimated total of 2,000 staff needed to cover the scope of control

measures in Myanmar, including border trade points.⁶⁸ Inspectors also have limited capacity to conduct product surveillance based on health risks. These poor surveillance capacities are further complicated by inadequate testing infrastructure.

The development of more adequate surveillance programmes has been limited by low interest on the part of compliance authorities, who have until recently been more focused on the government's self-sufficiency policies. Moreover, the new consumer protection associations are still in their infancy and cannot effectively lobby in favour of developing advanced product surveillance programmes. Additionally, these associations still lack recognition in Myanmar. As a result, there has been little outside pressure on authorities to implement more effective systems.

There is an absence of mechanisms to enforce consumer protection in Myanmar, as the newly created Consumer Affairs Department of MoC still lacks the experience and capacity to have influence and authority, and still needs to set up a public complaint hotline as a means to collect information about potential product deficiencies. Also, the Department is not supported by an effective law and adequate sanctions to enforce consumer protection. The Consumer Protection Bill was sent to Parliament in July 2013⁶⁹ and is still waiting to be endorsed. In addition to establishing national standards for products and services, it will be important that MoC and relevant institutions set up a control and certification system to deliver a quality mark (voluntary standard) indicating those products that comply with GAP, GAqP, GHP, GMP, HACCP, etc..

ENTERPRISE ISSUES (DEMAND-SIDE)

68. Wai Yee Lin & Masahiro Yamao (2012). An Assessment of Food Control System and Development Perspective: The Case of Myanmar. *International Science Index*, vol. 6, No. 9 (26 September), p. 754. World Academy of Science, Engineering and Technology.

69. San Yamin Aung (2013). Ministry of Commerce opens Consumer Affairs Department. *The Irrawaddy*, 19 September. Available from <http://www.irrawaddy.org/economy/ministry-commerce-opens-consumer-affairs-department.html>.

Box 11: Enterprise issues affecting quality in Myanmar

- Inadequate knowledge of QM requirements on the part of farmers, processors and traders limits the uptake of QM practices.
- Limited application of GAP, GHP, GMP, quality and food safety systems hinders exports to the EU and the United States.



INADEQUATE KNOWLEDGE OF QM REQUIREMENTS ON THE PART OF FARMERS, PROCESSORS AND TRADERS LIMITS THE UPTAKE OF QM PRACTICES

Farmers, processors and traders have only a limited knowledge of both voluntary and mandatory technical requirements of target markets. This is due in large part to the limited availability of trainers, as discussed under the institutional issues section, which limits the availability of information on quality and food safety management. This is also complicated by the fact that institutions lack a clear mandate to deliver training and advisory services on quality issues. Furthermore, this situation perseveres due to the low utilization of new technologies (radio, journals, television, mobile phones and Internet) for information dissemination. Hence, there is limited knowledge of the benefits to be derived from enhanced quality and safety of production.

In addition to the dearth of training and advisory services resources, stakeholders have few incentives to increase their competencies in best practices. There are no specific price differentiation mechanisms that grade products' quality along the value chains, and small-scale producers/farmers generally do not engage in sorting and grading, which is instead performed at the processing and warehouse levels. This is further complicated by a lack of contract farming and integrated farms capable of supporting quality development along multiple segments of the value chain. Producers and farmers also lack reliable access to produce/quality price information.

As a result, small enterprises and entrepreneurs rarely benefit from the increase in value addition that accompanies greater QM practices. An important step towards rectifying this situation would be for associations to encourage QM at small-scale enterprises and help disseminate price/quality information in order to create both the opportunities and incentives to capitalize on greater participation in QM.

LIMITED APPLICATION OF GAP, GHP, GMP, QUALITY AND FOOD SAFETY SYSTEMS HINDERS EXPORTS TO THE EU AND THE UNITED STATES

As the two most advanced markets, Europe and the United States require the strict application of best practices. Myanmar's inability to implement GHP and GMP has therefore had a particularly damaging effect on export expansion to these more sophisticated markets. Due to the latest sanctions from the EU and the United States, few exporters have been engaged in trade with these regions recently. As a result, very few of Myanmar's enterprises have experience and knowledge of Western QM requirements.

Even when enterprises are aware of the importance of the prerequisites programmes and HACCP implementation, few employees and managers are trained and advised in such issues. While both the FDA and third party auditors do provide trainings on GMP and HACCP, the number of such trainings remains largely insufficient. In order for Myanmar to successfully penetrate these demanding markets, its enterprises must enhance their capacities in GHP and GMP implementation.



WHERE WE WANT TO GO

THE FUTURE PERSPECTIVE: THE WAY FORWARD

The analyses conducted as part of the strategy design process for the quality cross-sector indicate that Myanmar has yet to fully develop its capacities in this function, despite the positive steps that have been taken recently. Greater QM capacities would have far-reaching positive impacts on Myanmar's export value chain. In addition to

facilitating stronger, long-term export relationships and helping enterprises introduce goods to new, more demanding markets, the strategic options set forth here should ultimately lead to more stable socioeconomic development for Myanmar.

In line with the list of issues identified, the following vision has been developed for the quality cross-sector function

“ A consistent and reliable national quality infrastructure continuously adapting to Myanmar's growth trajectory and enabling its products to be recognized nationally and internationally. ”

HOW TO GET THERE

The vision of the strategy to have “A consistent and reliable national quality infrastructure continuously adapting to Myanmar’s growth trajectory and enabling its products to be recognized nationally and internationally” responds to the constraints, but equally to the ambitions, identified in the cross-sector strategy. The following section explains the framework that will guide the implementation of the strategy. A detailed action plan setting out what needs to be done, and by whom, is presented at the end of this section.

STRATEGIC OBJECTIVES

The following four strategic objectives have been identified in order to achieve the overall vision for the cross-sector:

1. Revise and modernize policies, regulations, standards and SPS measures, and implement them to comply with international regulations;
2. Upgrade the trade-facilitating technical regulatory framework in order to build confidence and transparency between producers and consumers and adequately develop trade;
3. Enhance awareness and knowledge of the importance of quality and embed a quality/safety culture with adoption of best practices in quality by farmers, processors, exporters and traders;
4. Improve coordination and collaboration both within the QMI –through strengthened public–private dialogue and partnerships– and with regional and international partners.

These strategic objectives are structured around a specific set of activities that are intended to address the wide range of issues confronting the quality function in Myanmar. Independent, yet mutually supporting, activities will bolster specific areas of weakness. The coordinated resolution of such weaknesses will serve as the foundation for value added interaction between functional areas. This, in turn, will lead to the realization of the strategic objectives and, ultimately, the cross-sector vision.

Each of the strategic objectives relies upon a set of operational objectives. The operational objectives are intermediate achievements that must be reached in order for the strategic objectives to be met. At the most basic level, the operational objectives are realized through the implementation of various concrete activities, each of which serves to support a specific priority area within the competency of the relevant operational objective. Ideally, each activity will be translated into a project of its own. To this end, the “Existing programmes or potential support” in the PoA is provided so that donors and technical partners may identify activities that are in line with their own competencies, thereby facilitating the coordination and alignment of activities into real-life initiatives.

IMPORTANCE OF COORDINATED IMPLEMENTATION

The broad range of activities, together with the complex nature of integrated intervention, requires careful implementation that efficiently directs resources and monitors results at both the micro and macro levels. To this end, a Myanmar Trade Development Committee (MTDC) was established in order to facilitate the public–private partnership in elaborating, coordinating and implementing the NES. In particular, the MTDC is tasked with coordinating the implementation of activities in order to optimize the allocation of both resources and efforts across the wide spectrum of stakeholders. As part of the NES, the implementation of the quality strategy also falls within the purview of MTDC.

Such efforts will involve directing donor and private and public sector organizations towards the various NES priorities in order to avoid duplication and guarantee maximum impact. Responsibilities will also include monitoring the results of activities, outputs and outcomes, while at the same time recommending policies that could serve to enhance realization of the strategic objectives. With a 360 degree view of progress, the MTDC will be best placed



to manage funding and provide regular reports to donors and stakeholders. Moreover, the MTDC will play a key role in recommending revisions and updates to the strategy so that it continues to remain relevant to, and aligned with, Myanmar's changing needs.

IMPLEMENTATION PARTNERS –LEADING AND SUPPORTING INSTITUTIONS

The SD of MSTRD and MoC will both play leading roles in the implementation of the quality strategy. Responsible for standardization, metrology and accreditation, MSTRD is involved in a wide range of activities relevant to the

smooth functioning of QM. MITS of MoC, meanwhile, is tasked with providing certification services. As such, these two organizations are well-placed to direct and monitor implementation under this strategy.

In addition to these two ministries, a number of other institutions identified in the TSI section will play at least some role in implementing cross-sector activities. As outlined in the PoA, some of these supporting institutions may perform advisory functions, while others will take leading roles in implementing specific parts of the strategy that fall within their area of competency. Each institution mandated to support the development of the function is clearly identified in the strategy PoA.

THE REPUBLIC OF THE UNION OF MYANMAR NATIONAL EXPORT STRATEGY

QUALITY MANAGEMENT

CROSS-SECTOR STRATEGY 2015-2019

PLAN OF ACTION

The following action plan details all the activities to be undertaken over the next five years to achieve the vision of the strategy. The action plan is organized around strategic and operational objectives that respond to the constraints

and opportunities identified in the strategy. The action plan provides a clear and detailed framework for the effective implementation of the Quality strategy.



Strategic objective 1: Revise and modernize policies, regulations, standards and SPS measures, and implement them to comply with international regulations.								
Operational objective	Activities	Priority 1=high 2=med 3=low	Beneficiaries	Targets	Leading Implementing partner	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US\$)
1.1 Endorse and implement the new national quality policy and legislative framework.	1.1.1 Ensure the new national quality policy is rapidly endorsed and supported by a coherent legislative framework.	1	QM institutions, private sector and consumers	National quality policy endorsed QM law endorsed	MSTRD	UMFCCI, MoC, MoAI, MoLFRD, MoH	UNIDO	50 000
	1.1.2 Organize working groups between QM institutions and the private sector to disseminate the quality policy.	3	QM institutions, private sector and consumers	Five public meetings held	MSTRD	UMFCCI, MoC, MoAI, MoLFRD, MoH	UNIDO	50 000
	1.1.3 Provide capacity-building to staff of QM institutions and private sector QM operators to explain the implications of the new quality policy.	2	Exporters/importers	All staff of QM institutes trained	MSTRD	UMFCCI, MoC, MoAI, MoLFRD, MoH	UNIDO, ITC	30 000
1.2 Guarantee the rapid set up and operationalization of an integrated system for standardization.	1.2.1 Rapidly restructure MSTRD in line with the new Standards Law to ensure the rapid set up, operationalization and resourcing of the metrology, standards and conformity assessment divisions.	1	Exporters/importers	New divisions operational and sufficiently resourced	MSTRD	Attorney General, MoFR, Cabinet	UNIDO, PTB	500 000
	1.2.2 Finalize the drafting of the Metrology Law quickly and ensure its rapid endorsement to provide the legal basis for upgrading the metrology function of the NQI.	1	QM institutions, private sector and consumers	Metrology law endorsed	MSTRD	Attorney General	PTB	20 000
	1.2.3 Provide additional resources to secure the necessary human capital to the Metrology Division and ensure adequate/timely provision of services.	1	Exporters, importers, stakeholders	Increase in resources to Metrology Division	MoFR	MSTRD	PTB	500 000
1.3 Develop efficient new standards and technical requirements for key export/import sectors.	1.3.1 Increase regional and international collaboration with NSBs to align Myanmar standards to regional and international ones.	1	Exporters, importers, stakeholders	New standards aligned to international requirements	MSTRD (Standards Committee)			30 000
	1.3.2 Provide guidance and capacity-building to the SD of MSTRD and national standards committees on the elaboration of standards, technical regulations and SPS measures, aligned to the extent possible with international requirements, or adopt international standards.	1	QM institutions, private sector and consumers	New standards developed quickly and in line with international practice	MSTRD	UNIDO		100 000
	1.3.3 Ensure the Standards Committee and working and technical standards committees, in collaboration with the private sector, define and adhere to a timeline for the development and validation of new standards for priority exports/imports.	1	Exporters, importers, stakeholders	Minimum of five new standard per years	Standards Committee	Working and technical standards committees, UMFCCI		250 000
1.4 Disseminate newly approved standards to key inspection, regulatory and control institutions rapidly, using official communications, to ensure their application.	1.4.1 Disseminate newly approved standards to key inspection, regulatory and control institutions rapidly, using official communications, to ensure their application.	2	Exporters, importers, producers	Between one and three official communications per new published standard	MSTRD	Ministry of Communications and Information Technology		75 000
	1.4.2 Once standards are endorsed, increase public awareness of newly approved standards through structured communication efforts (websites, newspapers, etc.).	2	QM institutions, private sector and consumers	Standards disseminated on QM, MoC and private sector institutes	MoC	MSTRD, UMFCCI		10 000

Strategic objective 1: Revise and modernize policies, regulations, standards and SPS measures, and implement them to comply with international regulations.								
Operational objective	Activities	Priority 1=high 2=med 3=low	Beneficiaries	Targets	Leading Implementing partner	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US\$)
1.4 Reinforce the national accreditation system.	1.4.1 Support the strengthening and development of the Conformity Assessment Division of MSTRD to act as the NAFF and later NAB in Myanmar. Also, build linkages with private sector certification bodies and regional bodies to enhance the availability of certification services.	1	Private organizations (private labs, inspection bodies)	Adequate resources allocated to the Conformity Assessment Division	MSTRD	MoFR		500 000
	1.4.2 Set up an NAFF (NAFF–MSTRD) rapidly and formalize agreement with a partner accreditation body in the ASEAN region, possibly Thailand.	1	QM institutions, private sector and consumers	NAFF set up Agreement signed	MSTRD	MoFR, MoNPED	PTB	50 000
	1.4.3 Provide capacity-building on accreditation procedures and requirements to NAFF–MSTRD staff.	1	MSTRD	All NAFF and MSTRD staff trained on accreditation	MSTRD		PTB	25 000
	1.4.4 Disseminate information concerning the procedures and requirements for accreditation through seminars & workshops to national laboratories, certification bodies and inspection bodies.	2	Public/private labs, inspection bodies	Seventy-five percent of QM institutes' staff trained on accreditation	MSTRD–NAFF			80 000
	1.4.5 Complete a thorough assessment and roadmap of resources required for transitioning from NAFF to establishing a NAB. Implement the roadmap.	3	Public/private labs, inspection bodies, exporters, importers	NAB established	MSTRD–NAFF	UNIDO		100 000
1.5 Build the traceability system in Myanmar from production to market.	1.5.1 Build the technical knowhow of key institutions in Myanmar concerning the process requirements to establish and implement a traceability system.	2	Exporters, traders, producers, consumers	Four trainings per year	MSTRD	MoAI, MoLFRD, MoH, MoC	ITC	200 000
	1.5.2 Establish a pilot traceability system for one priority export sector and, based on lessons learnt, expand the pilot to other priority sectors.	1	Exporters, traders, consumers	Pilot established in 2015	MoLFRD or MoAI	MSTRD, MoH, MoC	ITC	300 000
	1.5.3 Collaborate with sector associations to expand membership and registration of traders to create better mapping of producers, traders and processors, in order to better trace product flows.	3	Exporters, traders, producers, consumers	Of all sector associations, 60% expand memberships and establish codes of conduct	UMFCCI	Sector associations, MSTRD		10 000
	1.5.4 Build awareness and practice concerning basic traceability requirements (i.e. an identifier and a record of its history at each link in the supply chain) with a focus on promoting traceability for access to EU and American markets.	3	Exporters, traders, producers, consumers	Two annual communications/publicity events	MoC	MSTRD	ITC	40 000

Strategic objective 2: Upgrade the trade-facilitating technical regulatory framework in order to build confidence and transparency between producers and consumers and adequately develop trade.								
Operational objective	Activities	Priority 1=high 2=med 3=low	Beneficiaries	Targets	Leading Implementing partner	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US\$)
2.1 Upgrade laboratories' instruments to ensure modern testing in line with market requirements.	2.1.1 Support relevant public laboratories to seek collaboration with international technical partners to elaborate a 'business plan' of services to be provided, and elaborate a list of equipment and input requirements.	1	Public/private laboratories	Eighty percent of labs have elaborated business plans	MSTRD	MoNPED/ individual laboratories	ITC	200 000
	2.1.2 Support and incentivize laboratories to specialize in the provision of specific tests in order to reduce duplications (this will facilitate the implementation of a single window system). During the standard development process technical committees will have to identify the recommended test method and leading laboratory for particular tests (i.e. PTAC as the trade laboratory, FDA & others for food safety etc.) for key target sectors/markets.	2	Public/private laboratories, exporters/importers	Eighty percent of labs have specialized their service offer	MSTRD (relevant technical committee)	Relevant ministries/ laboratories		10 000
	2.1.3 Increase collaboration with regional and international technical/financial partners to upgrade the testing equipment in line with public laboratories' business plans. List of needs to be transmitted to MoNPED by the Standards Committee and each public laboratory.	1	Public/private laboratories	All labs with business plans have some upgraded equipment	MoNPED	Respective ministries	UNIDO, German Agency for International Development- IS, PTB	2 000 000
	2.1.4 Based on laboratories' business plans, relevant ministries to allocate required financial resources for public sector lab service to ensure laboratories have the capacities to conduct adequate tests for exports.	1	Public laboratories	Of all public lab budget requirements, 65%-80% fully covered by head Ministry funding	MoFR	Respective ministries		10 000 000
2.2 Build and maintain the technical capacities of laboratory technicians.	2.1.5 Allow laboratories to adjust charges for services in line with actual costs and retain the revenues generated. Remaining gaps in resources for effective long-term development to be supplemented by the Government of Myanmar.	1	Public laboratories	All labs with business plans are able to adjust their fees based on costs and expenditures	MoFR	Standards Committee, MoNPED, relevant laboratories		10 000
	2.1.6 Encourage the development of private-public partnerships for the acquisition of certain testing equipment through possible joint ventures with international testing labs or testing services.	1	Public laboratories, exporters/importers	Two to three private-public partnerships established	Directorate of Investment and Company Administration	Investment commission, labs	ITC	50 000
	2.2.1 Establish, maintain and continuously improve a pool of internationally trained experts who can provide capacity-building to other national laboratory technicians. Explore synergies with the MoNPED internationally-trained trainers initiative.	2	Public/private lab technicians	Pool of trainers established and updated	MSTRD (Standards Committee)	MoNPED, respective ministries/private labs	ITC	20 000
	2.2.2 For working lab technicians, upgrade skills and ability through regular capacity-building courses, practical training and regular proficiency testing of capacities, as well as sending them to relevant training courses sponsored by regional/international organizations.	1	Lab technicians	Eighty percent of laboratory technicians' skills upgraded	MSTRD (Standards Committee)	Respective ministries/private labs	PTB	200 000
2.2.3 Ensure curriculum for newly formed university-trained laboratory technicians includes compulsory on-the-job training in order to receive their diploma.	2.2.3 Ensure curriculum for newly formed university-trained laboratory technicians includes compulsory on-the-job training in order to receive their diploma.	2	Public/private lab technicians	Curriculum upgraded	Ministry of Education	MSTRD (Standards Committee)		10 000
	2.2.4 Encourage laboratories, as part of the NQI (and set up a support fund/programme), to be accredited ISO/IEC 17025 (through NAPF-MSTRD).	2	Public/private labs, inspection bodies	Minimum of five of labs accredited	MSTRD	Respective ministries/private labs/inspection bodies	UNIDO	500 000

Strategic objective 2: Upgrade the trade-facilitating technical regulatory framework in order to build confidence and transparency between producers and consumers and adequately develop trade.								
Operational objective	Activities	Priority 1=high 2=med 3=low	Beneficiaries	Targets	Leading Implementing partner	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US\$)
2.2 Build and maintain the technical capacities of laboratory technicians.	2.2.5 In line with the Law on Standardization, build the number of ISO/IEC 17020 inspection bodies and ISO/IEC 17025 accredited labs to ensure testing in line with international best practice.	2	Public/private labs, inspection bodies	Minimum of five labs certified	MSTRD	Respective ministries/private labs/inspection bodies		200 000
	2.2.6 Increase participation in international laboratory networks, such as the International Laboratory Accreditation Cooperation, to stay attuned to the latest innovations and initiatives.	3	Public/private labs	MSTRD registered in two international networks	MSTRD	Respective ministries/private labs		20 000
2.3 Guarantee laboratories have adequately calibrated and maintained equipment, completed with adequate testing methodologies, to provide the highest quality services.	2.3.1 In line with upcoming reorganization at MSTRD and the endorsement of new metrology laws, make sure that MSTRD has sufficient resources to conduct calibrations on a continuous basis for all clients; to support the setting up of accredited labs; and to perform all its required duties.	1	Public/private labs	To be determined	MoFR	MoNPED		
	2.3.2 Set up a working group of technicians to collect, analyse and provide recommendations to laboratories concerning their testing methodologies. Ensure recommendations are aligned with requirements for international accreditation.	3	Public/private labs	Working group established	MSTRD	Public laboratories		20 000
	2.3.3 In line with vocational training schools, train more maintenance and repair technicians for lab instruments and equipment. Training should be in line with new technologies. Also, upgrade the curriculum to provide training on new technologies for sophisticated testing instruments.	2	Public/private labs	Curriculum updated Minimum of 100 new technicians graduate per year	Ministry of Education	Vocational schools, labs		100 000
2.4 Establish a network of laboratories in order to pool resources, and proceed to test comparisons.	2.4.1 Implement a pilot project to link selected labs together to conduct collective training sessions, proficiency tests and joint tests. Capitalize on existing experience (e.g. MSTRD Proficiency Testing for water samples among MSTRD, FDA, MAL, NHL, OH and MSTRD calibration of mass and balance) to proceed to inter-laboratory joint measures testing. Based on pilot success, establish a memorandum of understanding between the various labs to formalize working arrangements and confirm long-term collaboration.	2	Public/private labs	Pilot network established	MSTRD	Relevant ministries, private/public labs	PTB	100 000
	2.4.2 Set up 'group purchases' to jointly import laboratories' inputs (test tubes, chemicals, etc.) and support the establishment of private chemical suppliers by using a network/group of laboratories.	1	Public/private labs	Half of all labs participate in group orders	MSTRD	Relevant ministries, private/public labs, UMFCCI/associations		5 000
2.5 Expand testing capacities to border posts and key remote regions so they have access to testing.	2.4.3 Identify a network of labs in ASEAN that are accredited to provide needed tests and negotiate preferential treatment (i.e. fees).	3	Public/private labs	Agreement signed with regional lab networks	MSTRD	Relevant ministries, private/public labs, UMFCCI/associations		10 000
	2.5.1 Establish a formal dialogue with the Department of Borders (MoC) for establishing a work plan towards upgrading border posts with electricity, telecommunications and lab infrastructure to ensure QM tests can be conducted in suitable conditions and data reported to a central database.	1	Exporters/importers	Seventy percent of border posts upgraded	Myanmar Customs Department	MoC, MoAl, MoLFRD and other relevant ministries	Japan International Cooperation Agency, ASEAN corridors	1 000 000
	2.5.2 Have MSTRD, MoC, MoAl and other relevant ministries collaborate on deploying rapid test kits and setting up quarantine measures at border posts.	1	Exporters/importers, consumers	All border posts have rapid test kits	Myanmar Customs Department	MoC, MoAl, MoLFRD and other relevant ministries		200 000

Strategic objective 2: Upgrade the trade-facilitating technical regulatory framework in order to build confidence and transparency between producers and consumers and adequately develop trade.								
Operational objective	Activities	Priority 1=high 2=med 3=low	Beneficiaries	Targets	Leading Implementing partner	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US\$)
2.5 Expand testing capacities to border posts and key remote regions so they have access to testing.	2.5.3 Set up mobile labs for pesticides, aflatoxins, fertilizers, etc. testing, to be sent to rural regions to conduct tests at production level.	1	Exporters/importers, consumers	One mobile lab per region	MSTRD	MoC, MoAI, MoLFRD and other relevant ministries		2 400 000
2.6 Improve effectiveness of product surveillance programmes for consumer protection.	2.6.1 Have MoC Consumer Affairs Department and MoH-FDA increase coordination for effective monitoring of markets, and promote consumer protection based on the implementation of the upcoming consumer protection law. 2.6.2 Approve the consumer protection law and formalize/operationalize it with adequate resources for the consumer protection agency (in collaboration with a strengthened FDA) to protect consumers against hazardous goods and services. 2.6.3 Train inspectors on risk-based inspection, HACCP and inspection of imported products, and strengthen of the capacity of food health inspectors to conduct risk-based inspections. 2.6.4 Include registered consumer protection associations in working groups on QM and consumer protection.	1	Consumers	Quarterly meeting held	FDA	MOCUM FCCI		5 000
		2	Consumers	Consumer protection agency established and resources allocated	MSTRD	MoFR, MoNPED FDA, MoC		500 000
							ITC	
		2	Consumers	Consumer protection association part of standards working committee	MoC	Relevant ministries, UMFCCI/associations	ITC	2 000
		3	Exporters	Quality mark established	National Standards Committee	MoH-FDA, MoC consumer protection agency, UMFCCI		200 000
	2.6.6. Review and assess veterinary services/animal health control system using the OIE evaluation tool (PVS) and provide support to strengthen it.	1	Consumers	Assessment complete Increased capacities of veterinary services	MoLFRD	Relevant ministries, MoFR	ITC	100 000
2.8 Build Myanmar's SPS system.	2.8.1 Review/update national food legislation to establish a coherent framework based on a thorough assessment of the food control system (including strengths and gaps of the phytosanitary capacity (PCE tool)). 2.8.2 Develop and strengthen the SPS national committee and the SPS-NEP through technical training and targeted support.	1	Consumers	Assessment complete, food legislation revised	MSTRD	Relevant ministries, UMFCCI/associations	ITC	150 000
		1	Consumers	SPS committee strengthened	MSTRD	Relevant ministries, UMFCCI/associations		50 000

Strategic objective 3: Enhance awareness and knowledge of the importance of quality and embed a quality/safety culture with adoption of best practices in quality by farmers, processors, exporters and traders.								
Operational objective	Activities	Priority 1=high 2=med 3=low	Beneficiaries	Targets	Leading Implementing partner	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US\$)
3.1 Increase GAP, GMP and GHP, ISO and HACCP skills and knowhow of technicians and enterprises.	3.1.1 Expand the mandate of key QM institutions and departments in relevant ministries to ensure they provide the technical QM training and advisory services necessary to have a multiplier effect on quality systems in Myanmar. With mandate expansion ensure rational additional resource allocation (human, technical and institutional). Training and advisory services to be recognized and accredited at national level.	2	Exporters/importers / consumers	Expanded mandate of institutions and ministry departments Increase in resources	MSTRD (Standards Committee)	MoC, MoAI, MoLFRD, MoH, MoNPED	UNIDO, PTB	2 000 000
	3.1.2 Establish a dialogue between quality institutions and universities to review and upgrade the curricula of agricultural, industrial and health sciences and technology courses to ensure technicians and graduates are properly trained on latest good practices in QM, including standards and conformity assessments.	2	Exporters/importers / technicians	Curriculum updated	Ministry of Education	MoC, MoAI, MoLFRD, MoH, MSTRD (Standards Committee)		50 000
	3.1.3 Develop new/adequate technical courses and on-the-job training jointly between the private and the public sector, to be provided by vocational schools and service providers at the national level. Ensure newly trained technicians receive nationally recognized certificates.	2	Exporters/importers / technicians	Seventy-five percent of newly trained technicians participate in on-the-job training	Ministry of Education	Vocational schools, MSTRD (Standards Committee)		100 000
	3.1.4 Strengthen collaboration with technical partners (regional and international) to set up on-the-job training for current technicians of MoAI, MoH, MoLFRD, etc., in order to upgrade their training skills in GAP, GMP, GHP, and HACCP. Specific programmes should be set up for each good practices training. Trained experts to receive nationally recognized certification/accreditation.	2	Exporters/importers / technicians	Seventy-five percent of current technicians have skills upgraded	MSTRD	MoC, MoNPED	UNIDO, PTB	300 000
3.2 Provide market information concerning the importance of QM.	3.1.5 Establish a pool of local experts on quality and food safety systems to provide a rapid response to emerging needs and requirements. Ensure the pool contains local advisers to assist enterprises to implement hygiene practices.	2	Exporters/importers / technicians	Pool established, maintained and updated	MSTRD			10 000
	3.1.6 Ensure regular testing of accredited trainers, auditors and inspectors to ensure adequacy of trainings and inspections in line with international best practice.	1	Technicians/inspectors	All accredited trainers tested	MSTRD	MoC, MoAI, MoLFRD, MoH	ITC	150 000
	3.2.1 Review roles of QM institutes to include the function of collection, analysis and dissemination of export market technical requirements (standards, technical regulations, SPS). Information provided by QM institutes to be part of a trade information network in collaboration with MoC, UMFCCI, etc.	2	Exporters/importers	Seventy-five percent of QM institutes provide QM-related information to the trade information network	MoC	UMFCCI, MoC, MoAI, MoLFRD, MoH & private associations	ITC	100 000
	3.2.2 Establish a central database, managed and maintained jointly between QM institutions, for the collection, storage and dissemination of technical market requirements.	1	Exporters/importers	Database established and regularly updated	MSTRD (WTO-NEP)	MoC, MoAI, MoLFRD, MoH	ITC	30 000
3.2.3 Use new technologies (radio, cell phone, internet etc.) to collect and disseminate information on QM to enterprises.	3.2.4 Enable WTO-NEP to screen new regulations that may affect trade and disseminate them through different means. Collaborate with MoC (DoTP), UMFCCI and MSTRD to create a mechanism to ensure exporters are always aware of new regulations and do not see their exports suddenly rejected by importing countries.	2	Exporters/importers	Between one and two QM-related pieces of information disseminated per week	MoC	UMFCCI, MSTRD, MoAI, MoLFRD, MoH	ITC	25 000
		1	Exporters/importers	Changes to technical requirements tracked and reported	MSTRD	UMFCCI, MoC, MoAI, MoLFRD, MoH	ITC	100 000

Strategic objective 3: Enhance awareness and knowledge of the importance of quality and embed a quality/safety culture with adoption of best practices in quality by farmers, processors, exporters and traders.								
Operational objective	Activities	Priority 1=high 2=med 3=low	Beneficiaries	Targets	Leading implementing partner	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US\$)
3.2 Provide market information concerning the importance of QM.	3.2.5 Establish a mechanism to collate comments from the private sector on notified SPS and technical regulations based on sector concerns.	2	Exporters/importers	Changes to technical requirements tracked and reported	MSTRD	UMFCCI, MoC, MoAI, MoLFRD, MoH	ITC	20 000
3.3 Encourage adoption of GAP/GAqP/GMP/GHP/HACCP for export products.	3.3.1 Support enterprises (import/export) through one-to-one trainings and support in order to define and use legal model contracts to formalize transactions based on quality.	2	Exporters/importers	Two trainings provided annually to enterprises	MoC	UMFCCI	ITC	30 000
	3.3.2 Establish regular advisory services for the private sector (central training centre and in-enterprises training) to build up the number of enterprises informed of and practicing good practices.	2	Exporters/importers / technicians	Quarterly trainings available to the private sector	UMFCCI	MSTRD	UNIDO, PTB	200 000
	3.3.3 Increase the role of cooperatives in the dissemination of information on the structure and importance of quality requirements.	2	Exporters/importers	Sixty percent of cooperative members understand the importance of quality requirements	Ministry of Cooperatives	MSTRD, MoC, MoAI, MoLFRD, MoH		100 000
	3.3.4 Encourage the establishment of an integrated production scheme (farm to export) for specialized export products in order to increase and facilitate QM, controls and certification in line with target market requirements.	2	Exporters/importers	Between one and five integrated farms established per priority sector of the NES	MoAI	Relevant ministries/organizations/UMFCCI		100 000
3.4 Build the good manufacturing capacities of enterprises to enable conformity with target market quality requirements.	3.4.1 Incentivize enterprises, through grants or other support, to seek training and specialized guidance from specialized and accredited trainers/advisers. A model of a national grant or levy system could also be developed, based on international best practices, where the industry can claim back part of the registration fee.	3	Producers/exporters	Five hundred enterprises receive support	UMFCCI	MoC		50 000
	3.4.2 Support/incentivize enterprises to get international certification such as ISO 9001 certification by providing information about the benefits of certification, assistance in the completion of application forms, advisory services and/or training to enterprises, grants, etc.	2	Processors, inspectors	One thousand enterprises receive support for certification	MoC-DoP	UMFCCI, MSTRD		100 000
	3.4.3 Implement a communication campaign and training seminars about the importance of QM for export/import goods to relevant ministries, related associations under UMFCCI, DoTP, DCCA, and public/private labs.	2	Producers, exporters, importers	Biannual communication campaign implemented	MSTRD	UMFCCI		150 000

Strategic objective 4: Improve coordination and collaboration both within the QMI – through strengthened public–private dialogue and partnerships – and with regional and international partners.								
Operational objective	Activities	Priority 1=high 2=med 3=low	Beneficiaries	Targets	Leading Implementing partner	Supporting implementing partners	Existing programmes or potential support	Estimated costs (US\$)
4.1 Create a favourable environment to encourage the development of public–private dialogue and partnerships.	4.1.1 Enable a specific committee, such as the TBT or SPS national committees or the NTM national committee, to act as a formal public and private dialogue forum to ensure coordination and cooperation in the QM function.	1	QM institutions, private sector and consumers	Committee recognized by decree to be the official public–private dialogue forum	MSTRD	UMFCCI		2 000
	4.1.2 Organize monthly meetings of the nominated committee to discuss emerging themes and issues related to development of the QMI.	1	Exporters/importers / traders/processors	Monthly meetings organized	MSTRD	MoC, UMFCCI		100 000
	4.1.3 Organize a structured advocacy campaign for strengthening collaboration and establish cooperation mechanisms between relevant ministries related to QM.	3	Exporters, traders, producers, consumers, laboratories	Five meetings of ministries related to QM organized	MoC	MSTRD		10 000
	4.1.4 Hold technical workshops on quality control (procedures, regulations, practices, food safety) involving relevant ministries, private and public labs, and associations under UMFCCI (awareness for stakeholders).	2	Exporters/importers	One technical meeting per quarter	MoC	MSTRD		40 000
	4.1.5 Organize a laboratory technicians and managers association that could represent the interests of public and private laboratories.	2	Laboratory technicians	Association established	UMFCCI	MSTRD		5 000
4.2 Improve coordination and collaboration with our regional and international partners	4.2.1 Participate in regional and international trainings organized by existing or potential partners as a means to explore opportunities for extended partnerships.	1	Exporters/importers	Attendance at five trainings per year	MSTRD	MoC	UNIDO	50 000
	4.2.2 Organize a QM management event in Myanmar and attract partners to a forum of discussion and possibly build partnerships.	3	Exporters/importers	One event held	MSTRD	MoC		50 000
	4.2.3 Participate in regional/international QM (testing, metrology, etc.) trade fairs and exhibitions (to improve knowledge of emerging trends).	2	Exporters/importers	Attendance at five training per year	MoC	UMFCCI, MSTRD	UNIDO	50 000
	4.2.4 Support active participation in the WTO TBT and SPS committees and technical committees i.e. Codex, ISO, etc.).	2	Exporters/importers	Attendance at five committee meetings per year	MoC	UMFCCI, MSTRD	UNIDO	50 000

APPENDIX 1 : MEMBERS OF SECTOR TEAM

No	Name	Designation	Organization	E-mail
1	Dr.Tun Zaw	Director	Food and Drug Administration (FDA), Ministry of Health	tunzawdr@gmail.com
2	Dr. Aung Myint	Deputy Director	Ministry of Industry	uaungmyint2014@gmail.com
3	U Nay San	Deputy Director	Ministry of Commerce	naysanpaya@gmail.com
4	U Kyaw Thu	Deputy Director	Ministry of Commerce	maptpyay @Gmail.com
5	Daw May Than Chit	Deputy Director	Small Scale Industries Department, Ministry of Cooperatives	
6	Daw Phyu Phyu Win	Deputy Director	Ministry of Commerce	
7	Dr. Myat Myat Soe	Head of Office	Metallurgical Research Development Centre, Department of Technology Promotion and Coordination (MSTRD)	dr.myatmyatsoe99@gmail.com
8	Dr. War War Moe	Principle Scientist	Myanmar Scientific and Technological Research Department (MSTRD)	wwmoegan4@gmail.com
9	Daw Nilar Thein	Assistant Director	Ministry of Commerce	Nlthein24@gmail.com
10	U Zaw Win	Assistant Director	Ministry of Commerce	uzawwinptac@gmail.com
11	U Kyaw Lwin	Assistant Director	Ministry of Agriculture & Irrigation	ppmas.moai@gmail.com
12	U Thet Naing	Staff Officer	Department of Fisheries	thetnaingkatar@gmail.com
13	U Kyaw Soe	General Manager	MIT S	
14	Dr. Aye Kyaw	Manager	Myanmar Food Processors and Exporters Association	ayekyawmafpea@gmail.com
15	U Ohn Than	Chief Executive	Myanmar Rubber Planters & Producers Association	ohnthan01@gmail.com
16	Daw San San Win	Assistant General Manager/Coordinator	MIT S	sansanwin05@gmail.com

No	Name	Designation	Organization	E-mail
17	Daw Aye Myint Oo	Assistant General Manager	MITS	
18	U Htay Shwe	Assistant General Manager	MITS	htayshwe2@gmail.com
19	U Aung Kyaw Htoo	Business Manager	Societe Generale De Surveillance	aung.kyawhtoo@sgs.com
20	U Min Min Zin	General Manager	United World Industries Co., Ltd	uminminzin @gmail.com
21	U Maung Maung Myint	Assistant General Manager	Oversea Merchandise Inspection Co., Ltd	omic.myanmar.com.mm

BIBLIOGRAPHY

- ASEAN (1998). ASEAN framework agreement on mutual recognition arrangements. Available from <http://www.asean.org/communities/asean-economic-community/item/asean-framework-agreement-on-mutual-recognition-arrangements-2>.
- Food and Agriculture Organization of the United Nations (FAO) (2008). Good Agricultural Practices. Available from <http://www.fao.org/prods/gap/>.
- FAO (2006). Fishery Country Profile: Myanmar. Available from <http://www.fao.org/fi/oldsite/FCP/en/MMR/profile.htm>. Accessed 27 November 2013.
- FAO (2004). *Assessment and Management of Seafood Safety and Quality*. FAO Fisheries Technical Paper 444. Rome.
- FAO Fisheries and Aquaculture Department (2014). National aquaculture legislation overview – Myanmar. Available from http://www.fao.org/fishery/legalframework/nalo_myanmar/en.
- ISO (2013). ISO Survey: evolution of ISO 9001 certificates in Myanmar. Available from <http://www.iso.org/iso/home/standards/certification/home/standards/certification/iso-survey.htm?certificate=ISO>.
- ITC (2011). *Export Quality Management: A Guide for Small and Medium-Sized Exporters, Second Edition*. Geneva.
- Ministry of Health Malaysia & Japan International Cooperation Agency (2002). *Guidelines on Good Hygiene Practices for Small and Medium Scale Food Industries Towards HACCP*.
- Myanmar State Law and Order Restoration Committee (1997). *National Food Law (Law No. 5/97)*.
- Myanmar State Law and Order Restoration Committee (1995). *The Veterinary Committee Law (Law No 9/95)*.
- Myanmar State Law and Order Restoration Committee (1994). *The Science and Technology Development Law (Law No. 5/94)*.
- Myanmar State Law and Order Restoration Committee (1993). *The Animal Health and Development Law (Law No. 17/93)*.
- Myanmar State Law and Order Restoration Council (1993). *The Plant Pest Quarantine Law (Law No. 8/1993)*.
- Republic of the Union of Myanmar, Ministry of Health (2013). Health and health related laws. Available from <http://www.moh.gov.mm/Law.htm>. Accessed 27 November 2013.
- Republic of the Union of Myanmar, Ministry of Science and Technology (2007). Myanma Scientific and Technological Research Department (MSTRD). Available from http://www.most.gov.mm/index.php?option=com_content&task=view&id=83.
- San Yamin Aung (2013). Ministry of Commerce opens Consumer Affairs Department. *The Irrawaddy*, 19 September. Available from <http://www.irrawaddy.org/economy/ministry-commerce-opens-consumer-affairs-department.html>.
- U Myo Myint (Plant Protection Division, Myanmar Agriculture Service). Myanmar Country Report.
- UNIDO (2013). Trade Capacity Building: Resource Guide (Norway). Available from http://www.tcbresourceguide.org/vol2/bilateral_services/compliance_infrastructure/norway.html. Accessed 27 November 2013.
- UNIDO (Myanmar Standards Department) (2013). *Myanmar: Strengthening the National Quality Infrastructure for Trade (Mission Report)*.
- University of Kentucky, College of Agriculture: Cooperative Extension Service (2012). Good Agricultural Practices (GAP). Available from <http://www.uky.edu/Ag/CCD/introsheets/gap.pdf>.
- Wai Yee Lin & Masahiro Yamao (2012). An Assessment of Food Control System and Development Perspective: The Case of Myanmar. *International Science Index*, vol. 6, No. 9 (26 September). World Academy of Science, Engineering and Technology.
- Win, Dr. P.P. (MSTRD). Current Status of Quality Management Infrastructure in Myanmar. ESCAP presentation.
- WTO (2013). SPS agreement training module, chapter 1: Introduction to the SPS agreement: What is an SPS measure? Available from http://www.wto.org/english/tratop_e/sps_e/sps_agreement_cbt_e/c1s3p1_e.htm.



Myanmar Ministry of Commerce

Postal address: Office No.3, Zeya Htani Road
Nay Pyi Taw
Phone: +95 67 408495 / +95 67 408266
Fax: +95 67 408256
E-mail: nesmyanmar@gmail.com



International Trade Centre

Street address: 54-56, rue de Montbrillant
1202 Geneva, Switzerland
Postal address: Palais des Nations
1211 Geneva 10, Switzerland
Telephone: +41-22 730 0111
Fax: +41-22 733 4439
E-mail: itcreg@intracen.org
Internet: www.intracen.org

With the financial support of:



Federal Ministry
for Economic Cooperation
and Development

In collaboration with:

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH