UNIDO EVALUATION GROUP

Independent Evaluation Report

Market Access and Trade Facilitation Support for South Asian LDCs through Strengthening Institutional & National Capacities related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II

TE/RAS/07/001

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Independent Evaluation

Market Access and Trade Facilitation Support for South Asian LDCs through Strengthening Institutional and National Capacities related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II

UNIDO project: TE/RAS/07/001

Evaluation conducted under special funding from the
Norwegian Agency for Development Cooperation (NORAD)
in close cooperation with UNIDO

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna, 2012

Distr. GENERAL

ODG/EVA/12/R.5

October 2012

Original: English

This evaluation was managed by the responsible UNIDO project manager with quality control by the Evaluation Group.

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ACKNOWLEDGEMENTS

This independent evaluation of the United Nations Industrial Development Organization (UNIDO) Market Access and Trade Facilitation Support for South Asian LDCs through Strengthening Institutional and National Capacities related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II has been conducted with funding from the Norwegian Agency for Development Cooperation (NORAD) in close cooperation with the UNIDO Evaluation Group (EVA) by Mr Colm M. Halloran.

The independent evaluator acknowledges with appreciation the cooperation of the TCB project management at UNIDO Headquarter (HQ) in Vienna and in the field. The team also acknowledges with appreciation the cooperation and comments of the intermediary and direct beneficiaries in Bhutan, Bangladesh, Nepal and the Maldives and other stakeholders consulted during the evaluation process.

ABBREVIATIONSAND ACRONYMS

AB	Accreditation Body
ADB	Asian Development Bank
APLAC	Asia Pacific Laboratory Accreditation Cooperation
APLMF	Asia Pacific Legal Metrology Forum
APMP	Asia Pacific Metrology Programme
BAB	Bangladesh Accreditation Board
BAFRA	Bhutan Agriculture and Food Regulatory Authority
BCCI	Bhutan Chamber of Commerce and industry
BCSIR	Bangladesh Council of Scientific and Industrial Research
BDS	Bangladesh Standards
BEST	Better Work and Standards Programme
BIPM	International Bureau of Weights and Measures
BLQS	Bureau of Laboratory Quality Standards
BQSP	Bangladesh Quality Support Programme
BRC	British Retail Consortium
BSB	Bhutan Standards Bureau
BSTI	Bangladesh Standards and Testing Institution
BUET	Bangladesh University of Engineering and Technology
CEC	Committee on Economic Cooperation
CFL	Central Food Laboratory, DFTQC
CGPM	General Conference on Weights and Measures
CODEX	Codex Alimentarius Commission
CTA	Chief Technical Advisor
DFID	UK Department of Development Aid
DFTQC	Department of Food Technology and Quality Control, Nepal
DG	Director General
DNV	Det Norske Veritas
DoT	Development and Trade, MOEA,
EC	European Community
ESCB	Engineering Staff College of Bangladesh
FAO	Food and agricultural organisation
FAO	Food and Agricultural Organization
FBCCI	Federation of Bangladesh Chambers of Commerce and Industry
FICCI	Federation of Indian Chambers of Commerce and Industry
FNCCI	Federation of Nepalese Chambers of Commerce and Industry
FSMS	Food Safety Management System
FTA	Free Trade Area
FVO	Food and Veterinary Office
GDP	Gross Domestic Product
GHP	Good Hygiene Practices
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit - the Federal German Development Agency
GMP	Good Manufacturing Practice
GoB	Government of Bangladesh
GoM	Government of the Maldives

GoN	Government of Nepal
HACCP	Hazard Analysis and Critical Control Points
HQ	Headquarters
IAF	International Accreditation Forum)
IEC	International Electro-technical Commission
IILM	Indian Institute of Legal Metrology
ILO	International Labour Organisation
IPPC	International Plant Protection Convention
IS	Indian Standards
ISO	International Organization for Standardization
JICA	Japan International Cooperation Agency
KRISS	Korean Institute of Standards and Science
LDC	Least developing countries
LFA	Logical framework analysis
MDG	Millennium Development Goal
MED	Ministry of Economic Development, formerly the MEDT the Maldives
MEDT	Ministry of Economic Development and Trade, the Maldives
MFA	Multi-fibre Agreement
MFDA	Maldives Food and Drug Authority
MFEA	Maldives Fish Exporters Association
MLA	Multilateral Recognition Arrangement
MNCCI	Maldives National Chamber of Commerce and Industries
MoAC	Ministry of Agriculture and Cooperatives, Nepal
MoEA	Ministry of Economic Affairs, Bhutan
MoFA	Ministry of Fisheries and Agriculture, the Maldives
MoHF	Ministry of Health and Family, the Maldives
MoI	Ministry of Industries, Bangladesh
MoICS	Ministry of Industry Commerce and Supplies, Nepal
MoIN	Ministry of Industries, Nepal
MOU	Memorandum of Understanding
MRL	Minimum residue limit
MSC	Management System Certification
MSCS	Management System Certification Scheme
MSMC	Maldives Standards & Metrology Centre
MSMU	Maldives Standards & Metrology Unit (now the MSMC)
MTE	Mid-term Evaluation
MWHS	Ministry of Works and Human Settlement, Bhutan
NABCB	National Accreditation Board for Certification Bodies, India
NABL	Indian National Accreditation Board for Laboratories, India
NBSM	Nepal Bureau of Standards and Metrology
NEPLAS	Nepal Laboratory Accreditation Scheme
NHSL	National Health Service Laboratory, MFDA
NMI	National Metrology Institute
NORAD	Norwegian Agency for Development
NPC	National Project Coordinator
NPIA	Nepal Pashmina Industries Association
NQCL	National Quality Control Laboratory, BAFRA
NS	Nepalese Standards

NSB	National Standardization Body
NTB	Non-tariff Barrier
OECD	Organisation for Economic Cooperation and Development
OHAS	Occupational Health and Safety
OIE	Organization for Animal Health- Office International des Epizooties
PCS	Product Certification Scheme
PRSP	Poverty Reduction Strategy Paper
PTB	Physikalisch-Technische Bundesanstalt – German Metrology Institute
QCI	Quality Council India
QMS	Quality management system
QMS	Quality Management Systems
RGoB	Royal Government of Bhutan
RIM	Royal Institute of Management, Bhutan
RMG	Ready made garment
SA	Social Accountability
SAARC	South Asian Association for Regional Cooperation
SAFTA	South Asian Free Trade Area
SAPTA	SAARC Preferential Trading Arrangement'
SARS	SAARC Regional Standards
SARSO	South Asian Regional Standards Organization
SCCI	SAARC Chamber of Commerce and Industry
SIRIM	Standards and Industrial Research Institute of Malaysia
SMC	Standards and Metrology Centre
SMART.	Specific, measurable, achievable, relevant, and time-bound.
SME	Small and Medium Enterprises
SPRING	Standards, Productivity and Innovations Board
SPS	Sanitary and Phytosanitary Measures
SQCA	Standards and Quality Control Authority, Bhutan
SQM	Standing Group on Standards, Quality Control and Metrology (SAARC)
SQMT	Standards, Quality, Metrology and Testing
SSCB	SAARC Standards Coordination Board
TAB	Thai Accreditation Board
TBT	Technical Barriers to Trade
TCB	Trade Capacity Building
TISI	Thai Industrial Standards Institute
TOR	Terms of Reference
UCSSIC	South-South Industrial Cooperation
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organisation
WRAP	Wide Responsible Apparel Production
WTO	World Trade Organization

EXECUTIVE SUMMARY

This report presented the results of the Final Evaluation of the Market Access and Trade Facilitation Support for South Asian Least Developed Countries (LDCs) through Strengthening Institutional and National Capacities related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II. The UNIDO Evaluation Group engaged an independent evaluator to carry out this evaluation. The LDCs are Bangladesh, Bhutan, Maldives and Nepal. The project was launched in September 2007 with an expected completion date of 30 June 2012. It is a follow up to Phase I which was implemented from 2002-07. The total operational project budget was USD 2,000,000. The project was funded by the Norwegian Agency for Development Cooperation (NORAD).

The evaluation was carried out in close cooperation with the UNIDO Evaluation Group. The assignment commenced on March 10th 2012 with a briefing by the Project Manager at UNIDO Headquarters (HQ) in Vienna. This was followed by a review of project documentation in parallel with field visits to each country from March 12th to April 5th 2012. Preliminary findings and recommendations for all countries were presented at the Norad-UNIDO Annual Meeting which was held in UNIDO HQ in Vienna, 18 – 19 April 2012. The draft final report was then prepared. The contributions and comments of all stakeholders interviewed as well as the comments received at the Norad-UNIDO Annual Meeting were taken into account in finalizing the report.

The Project has been successfully implemented and significant benefits delivered to the stakeholders of the national quality infrastructure in all participating countries. The targeted outputs have been fully achieved. In Bangladesh, about 90 per cent in Bhutan and about 70 per cent the Maldives and Nepal where project implementation was delayed as a result of events outside the control of the Project management.

The intervention significantly strengthened the Bangladesh Standards and Testing Institution (BSTI) Product Certification Scheme (PCS), Management System Certification Scheme (MSCS) and Textile laboratory. BSTI PSC, with project support, has achieved accreditation to International Standardization Organisation (ISO)/ International Electro technical Commission (IEC) Guide 65:1996 'General requirements for bodies operating product certification systems' for the provision of certification services to Bangladesh National Standards (BDS) for 5 product categories. It has established a strong basis on which to extend accreditation for certification to international products standards. The BSTI MSCS has similarly achieved accreditation to ISO/IEC 17021:2006 'Conformity assessment -- Requirements for bodies providing audit and certification of management systems standard' to provide certification services for ISO 9001:2008 'Quality management systems – Requirements', ISO 14001:2005 'Environmental management systems', and ISO 22000: 2005' Food safety management systems (FSMS)-- Requirements for any organization in the food chain standards'. The BSTI Textile laboratory has received equipment and support in capacity building and has achieved accreditation to ISO/IEC 17025:2005 'General requirements for the competence of testing and

calibration laboratories' for 24 textile parameters. There was high level of ownership of in BSTI of the entire targeted outcome and sustainability plans were prepared which projected positive cash flows for the PSC, MSCS and the Textile laboratory. The Textile laboratory plan was however subject to achieving accreditation for an additional another 16 parameters which will allow it to offer a comprehensive service to its customers. Sustainability is likely for all the PSC and MSCS and probable for the Textile laboratory subject to additional TA being provided.

Similar support was provided to the Nepal Bureau of Standards and Metrology (NBSM) PCS and MSCS and Textile Laboratory. The NBSM PCS is expected to achieve accreditation to ISO Guide 65 to provide certification services to Nepal Standards (NS) for a number of products in 2012 or 2013 subject to continued donor support. Similarly the NBSM MSCS should achieve accreditation to ISO 17021 to provide certification services to ISO 9001 and ISO 14001 in the same period. The NBSM Textile laboratory, supported with refurbishment, equipment and training is also expected to achieve accreditation to ISO 17025 in 2012 on a number of parameters necessary for certification of Pashmina. Progress has been slower in Nepal as result of the unstable political situation which delayed implementation particularly in the first 2 years of the project. There was a high level of ownership of activities and outputs in all areas in the NBSM which supports sustainability. The PSC, MSCS and Textile laboratory sustainability plans forecast a positive cash flow subject to their achieving accreditation. Additional donor support will be required to facilitate this. The sustainability of the Textile Laboratory could be at risk if the Nepal Pashmina Industries Association (NPIA) decides to set up its own testing laboratory in competition to the NBSM.

In Bhutan the BSB was established with project support as the National Standards Body (NSB) and successor to the Standards and Quality Control Authority (SQCA). The project assisted in drafting the Bhutan Standards Act 2010, which set out the legal basis for the BSB, and in drafting the Weights and Measures Bill which is expected to be enacted in 2012. Capacity in standardisation was also significantly strengthened; a Standards Information Centre was established and training was provided to set up World Trade Organisation (WTO) Technical Barriers to Trade (TBT) Enquiry Point. Equipment and support in capacity building was also provided to the BSB to establish a Metrology Laboratory which will provide calibration services to a legal metrology inspectorate, to industry and to commercial traders. It is expected that the laboratory will achieve accreditation to ISO 17025 for dimensions of length and mass within the next 12 -15 months subject to continued donor support. There was a high level of ownership in the BSB of the intervention and sustainability looked assured as senior management were confident of continuing government support.

Similar support was provided to the Maldives Standards & Metrology Centre (MSMC) to strengthen its capacity in standardisation as the NSB, create a Standards Information Centre, set up a WTO TBT Enquiry point, establish a Metrology Laboratory and strengthen its legal metrology inspectorate. However staff shortages, the uncertain political situation and organisational changes arising from political decisions limited progress. Ownership in the MSMC was limited due to staff turnover

staff shortages and organisational changes. As a result it was not clear if capacity developed todate is sustainable. It is likely that additional TA will be required.

The project has succeeded in strengthening, with support in equipment and training, the food testing laboratories in Bhutan, the Maldives and Nepal. The National Quality Control Laboratory (NQCL) of the Bhutan Agriculture and Food Regulatory Authority (BAFRA) and the Central Food Laboratory (CFL) of Department of Food Technology and Quality Control (DFTQC) in Nepal are expected to achieve accreditation to ISO 17025 within the next 12 months subject to continued donor support. The National Health Laboratory (NHL) at the Maldives Food and Drug Authority (MFDA) achieved accreditation to ISO 17025 for its microbiology laboratory in 2008 and for its chemical laboratory in 2010. There was high of ownership of the outcomes in all the food testing laboratories. The sustainability plan of the CFL at the DFTQC forecast a positive cash flow. In contrast the sustainability plan of the NHL at the MFDA showed an increasing negative cash flow. However the MFDA were confident of continuing support from Government of the Maldives (GoM) as most of the testing services are provided to the fishing industry. The sustainability plan of the NQCL at BAFRA also showed a negative cash flow but BAFRA were also confident that the Royal Government of Bhutan (RGoB) will provide sufficient funding to cover it.

The national quality environment for food products was strengthened in all countries with support for capacity building provided to food processing entreprises in Bangladesh, Bhutan, the Maldives and Nepal to hotels in Bhutan for certification to ISO 22000; training provided for auditors and lead auditors and awareness workshops arranged for participants from the public and private sector on ISO 22000 The entreprises certified to ISO 22000 realised significant productivity increases which is likely to ensure the sustainability of the intervention. Demand for certification to ISO 22000 is also likely to increase particularly in Bangladesh and Nepal and this will support sustainability of the other outcomes in relation to auditor training and increased awareness.

Awareness seminars was also organised on social standards. These covered Wide Responsible Apparel Production (WRAP) standard in Bangladesh, Social Accountability (SA) 8000 standard in Bhutan and Nepal and Occupational Health and Safety (OHSAS) 18001 standard in Bhutan, the Maldives and Nepal. It was not possible to assess ownership of the outcomes targeted by these activities. With the exception of the Maldives these were once off seminars which were not directly linked to wider TA programs. As a result the strength and sustainability of the outcome is questionable. In the Maldives the MSMC developed a wider program to extend awareness of the OHSAS 18001 standard by arranging for similar seminars in all the major Atolls in the Maldives. This strengthened sustainability of the outcome.

The project was well managed in an efficient manner and strictly in accordance with UNIDO's rules on financial management. Where some overlap existed with EU project in Bangladesh and Nepal the Project management team ensured activities and output were implemented in complementary manner. The stakeholders interviewed generally expressed their satisfaction with the management of the project and the quality of the inputs provided. The Project management team implemented

or was in the process of implementing most of the general and country specific recommendations of the Mid Term Evaluation (MTE).

A comprehensive training was also successfully organised for fisherman in the Maldives on the hygienic handling of fish to meet international market requirements. Feedback from the industry suggested that the targeted outcome was achieved and is sustainable.

A four day hands-on training programme on quality improvement tools and techniques for senior managers was also completed in Bangladesh but as it was a once off workshop the strength of the outcome and sustainability was unclear.

In addition a plan was developed to control substandard and hazardous imported products in all countries. The targeted outcome was to raise government's attention in regard to this issue and this was likely achieved. However the quality and utility of the completed output was questionable.

The project design was relevant and consistent with the regional integration objectives of South Asian Association for Regional Cooperation (SAARC) as well as with the national development policies and plans of the LDCs. The strengthening of the national STMQ or quality infrastructure to international standards was and continues to be necessary to provide producers, exporters and the regulatory authorities with internationally recognised conformity assessment services at competitive prices to facilitate trade and to ensure a high level of consumer protection against unsafe goods being placed on the market.

Key planning and design strengths noted were the Long Term approach as well as the Regional and South-South approaches adopted to the provision of technical assistance (TA) and the use of sustainability plans for which were identified as key success factors (KSF) in the Thematic Evaluation Report on 'UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ) published in 2010. The project design was also complementary to European Union (EU) TA project in Bangladesh, and Nepal and with the World Health Organisation (WHO) in Bhutan. However there were a number of planning and design weaknesses which reduced the effectiveness of the project in terms of its contribution to its trade related aspects of the overall objective. These included a lack of in depth problem analysis, a weak stakeholder analysis, a weak logical framework, an over extended project scope and an insufficient regional focus on removing not tariff barriers (NTBs). Planning and design weakness create implicit opportunity costs to beneficiaries and stakeholders as they result in non-optimal outcomes and delay potential impact. However despite these weaknesses and as already noted above the project managed to deliver substantial benefits to stakeholders.

Although if one included Phase 1 the has been in place since 2002 key outcomes that could generate a potential impact have only been achieved since 2008 and many will only be achieved within the next 1-2 years. As a result it is not yet possible to assess potential impact.

Overall the Project has made progress towards achieving its Development Objective but additional TA is recommended in all countries to strengthen the sustainability of the outcomes achieved; to complete outcomes not yet fully achieved and to ensure the long term sustainability of the intervention.

A key recommendation to address weaknesses in planning and design and increase the effectiveness of project design in accordance with the project overall objective is that UNIDO should implement Recommendation 1 of the Thematic Evaluation Report noted above i.e. 'UNIDO should develop a structured and in-depth approach for SMTQ project preparation, including an assessment of demand and supply of SMTQ services and the identification of needs of SMTQ service users. Processes for project preparation should be clearly defined and consistently applied across the entire SMTQ portfolio'. To implement this it recommended that UNIDO should develop a standard methodology for project design based on logical framework analysis (LFA).

It is also recommended that UNIDO adopt a sector or value chain approach in designing STMQ or infrastructure support programs in order to increase the effectiveness of the design to achieve targeted impacts and minimise the time lag in achieving impact. This is in accordance with Recommendation 8 of the Thematic Evaluation Report noted above.

An additional key recommendation is that NORAD should allocate sufficient funds to UNIDO for detailed project formulation and design in accordance with the key recommendations of this report.

Further recommendations to the Trade Capacity Branch (TCB) for a follow-up Phase Three are included.

1. INTRODUCTION

This report presents the findings of an independent evaluation of the UNIDO 'Market Access and Trade Facilitation Support for South Asian LDCs through Strengthening Institutional and National Capacities' related to Standards, Metrology, Testing and Quality (SMTQ) project – Phase II'. This evaluation was carried out by an independent evaluator engaged by UNIDO and funded by NORAD.

The objective of the evaluation as per the terms of reference (TOR) is to:

- Conduct the evaluation of Phase II on the basis of DAC criteria i.e. relevance, effectiveness, efficiency, impact and sustainability.
- Assess accumulated outcomes and impacts from both phases;
- Assess the implementation of recommendations from the MTE of Phase II;
- Assess the implementation of recommendations from the Thematic Evaluation of UNIDO SMTQ projects; and
- Make recommendations for a potential third phase of the programme.

A copy of the TOR may be seen in annex 4.

The assignment began in early February 2012 with a preliminary review of project documentation and a briefing at UNIDO HQ in Vienna by the UNIDO Project Manager Mr. Ouseph Padickakudi, and his assistant Mr. Pradeep Paulose. Mr Peter Loewe, UNIDO Evaluation Officer participated as an independent observer. The evaluator also prepared sample questions to guide the interview process during the field mission. A full list of documents consulted in the process may be seen in Annex 2.

A decision was also taken to carry out a survey of the testing laboratories who participated in the intervention in each country in order to gather data to assess if potential impact to date, if any. The evaluator prepared survey questions for the laboratories and their customers and UNIDO engaged 4 local experts to implement it. As the survey has not yet been completed the results will be reported separately.

The evaluator carried out a field mission to Bangladesh, Bhutan, the Maldives and Nepal in order to assess stakeholders' views and evaluate project implementation. This took place between March 12th 2012 and April 5th 2012 with visits to Thimphu (Bhutan), Kathmandu (Nepal), Dhaka (Bangladesh) and Malé (Maldives). Preliminary findings and recommendations were given to key stakeholders and beneficiaries at the end of each visit. A list of persons consulted may be seen in Annex 1.

The evaluator presented preliminary findings and recommendations for all countries were presented at the Norad-UNIDO Annual Meeting which was held in UNIDO HQ in Vienna, 18 – 19 April 2012. The draft final report was then prepared. The contributions and comments of all stakeholders interviewed as well as the comments received at the Norad-UNIDO Annual Meeting were taken into account in finalizing the report.

1.1 Scope and Methodology

The evaluation was carried out by Mr Colm M. Halloran independent evaluator in accordance with the scope and methodology set out in the TOR. See Annex 4 for copy of the TOR.

1.2 Project Summary[1]

Project number: TE/RAF/07/001
Title of Project: Market Access and Trade Facilitation Support for South Asian LDCs through Strengthening Institutional and National Capacities related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II.
Start date: September 2007
Completion date: 30 June 2012, extended until 31 December 2012 as a decision of UNIDO-Norad meeting, Vienna, 18-19 April 2012

Government Co-ordinating agencies
Bangladesh: Ministry of Industries (MoI).
Bhutan: Ministry of Trade and Industry (MTI).
Maldives: Ministry of Economic Development (MED).
Nepal: Ministry of Industry, Commerce and Supplies (MoICS).

Counterparts
Bangladesh: Bangladesh Standards and Testing Institute (BSTI), Ministry of Industry (MoI), Engineering Staff College of Bangladesh (ESCB).
Bhutan: Standards and Quality Control Authority (SQCA) renamed Bhutan Standards Bureau (BSB), and Bhutan Agricultural and Food Regulatory Authority (BAFRA).
Maldives: Maldives Standards and Metrology Centre (MSMC) formerly the Maldives Standards and Metrology Unit (MSMU) , Ministry of Economic Development (MED) formerly the Ministry of Economic Development and Trade (MEDT), Maldives Food and Drug Authority (MFDA), Ministry of Fisheries (MF).
Nepal: Nepal Bureau of Standards and Metrology (NBSM), & Department of Food Technology and Quality Control (DFTQC).

Project Budget:

Project No.	Total Allotment in USD	Total Expenditure in USD	% Total Allotment used
TERAS07001 - Common Budget	**278,288**	**275,845**	99%
TERAS07A01 - Bangladesh	**364,446**	**361,815**	99%
TERAS07B01 - Bhutan	**503,184**	**491,612**	**98%**
TERAS07C01 - Maldives	**420,711**	**408,793**	97%
TERAS07D01 - Nepal	**433,380**	**432,669**	99%
TOTAL	**2,000,009**	**1,970,734**	**99%**

Source: Progress report 08.03.2012

[1] The summary is based on the TCB Project documents.

Development objective

To facilitate the industrial development and export capabilities of Bangladesh, Bhutan, Nepal and Maldives, as well as to protect their domestic society against substandard and hazardous product imports, thus spurring their economic growth, by the reduction of technical barriers to trade through the strengthening of their institutional structures and national capacities in standards, metrology, testing, quality and conformity assessment.

The immediate objectives, expected outcomes and outputs at national level in each country are:

BANGLADESH

Immediate Objective

To strengthen the product certification scheme and the textile laboratories of BSTI with a view to developing the quality competence of industry, and to develop national capability for training in quality management.

Outcomes

i. Bangladesh product certification marks accepted internationally.
ii. Technical constraints on exports reduced.
iii. Awareness created about quality management techniques among industrial managers.
iv. Plan developed to strengthen import quality control procedures.
v. Improved awareness of ISO 22000, WRAP, SA 8000 and OHSAS 18000 standards among industrial managers and
vi. Cost reduction of the quality management system certificate and increase in the number of companies with quality management system (QMS) certificates.

Outputs

Output 1.1 Product certification system of BSTI complies with ISO Guide 65 and is internationally accredited.

Output 1.2 Plan developed to control substandard and hazardous imported products.

Output 1.3 Textile laboratory of BSTI strengthened and accredited based on ISO/IEC 17025 and a suitable marketing strategy developed.

Output 1.4 Between 15 to 20 auditors trained for ISO 22000 Food Safety Management System and two food processing companies certified; awareness created among 100 industry personnel about WRAP standard and OHSAS 18000.

Output 1.5 Management System Certification Body of Bangladesh accredited.

Output 1.6 About 50 managers from industry trained in quality improvement tools and techniques.

BHUTAN

Immediate Objective

To strengthen the standards cell in the SQCA, (renamed the BSB), its metrology laboratory and the food-testing laboratory of BAFRA, and to develop a national capability for training in quality management with a view to developing the quality competence of the nascent industry.

Outcomes

i. Technical constraints on exports reduced.
ii. Awareness created about quality management techniques among industrial managers.
iii. Plan developed to strengthen import quality control procedures.
iv. Improved awareness of ISO 22000, SA 8000 and OHSAS 18000 standards among industrial managers and
v. More clients for SQCA services related to legal and industrial metrology.

Outputs

Output 2.1 Capability created in the standards cell for adoption of standards, and WTO TBT Inquiry Point/Standards Information Centre strengthened.
Output 2.2 Plan developed to control substandard and hazardous imported products.
Output 2.3 Legal and industrial metrology laboratory established.
Output 2.4 Food testing laboratory of BAFRA strengthened and accredited.
Output 2.5 Fifteen auditors trained on ISO 22000 and enhanced Hazard Analysis and Critical Control Points (HACCP) and ISO 22000 auditing capacity through certification of two food processing units for each of the above standards.
Output 2.6 Awareness created about SA 8000 and OHSAS 18000 standards.
Output 2.7 About 20-30 managers from industry trained in quality improvement tools and techniques.

THE MALDIVES

Immediate Objective

To strengthen the Standards Cell and Legal and Industrial Metrology laboratory of the MSMC and to enhance the capability of the national food-testing laboratory of the MFDA, leading to its accreditation with a view to increasing its fishery exports.

Outcomes

i. Technical constraints on exports reduced.
ii. Plan developed to strengthen import quality control procedures.
iii. Improved awareness of ISO 22000 and OHSAS 18000 standards among industrial managers.
iv. More clients for MSMC services related to legal and industrial metrology.
v. Reduction in the quality risks in the export of fish products.

Outputs

Output 3.1 Capability built in the standards cell for adoption of standards and WTO TBT Inquiry Point/Standards Information Centre strengthened.

Output 3.2 Plan developed to control substandard and hazardous imported products.

Output 3.3 Legal and industrial metrology laboratory established.

Output 3.4 National food testing laboratory of MFDA strengthened and accredited.

Output 3.5 Awareness created among personnel involved in fish harvesting about Good Hygiene Practices (GHP), and quality of fish products improved in the supply chain, and a report produced on the new business model, taking into account the varying fish harvesting seasons.

Output 3.6 Fifteen auditors trained on ISO 22000 and capacity built for certification and two fish processing units certified.

Output 3.7 Awareness created about OHSAS 18000 standards.

Output 3.8 Seven metrology cells established and metrology services decentralized and available to general population[2]

NEPAL

Immediate objective

To strengthen the product certification scheme and textile laboratory of the NBSM and the food testing laboratory of the DFTQC and to develop a national capability for training in quality management with a view to developing the quality competence of industry.

Outcomes

i. Product certification marks accepted internationally.
ii. Technical constraints on exports reduced.
iii. Awareness created about quality management techniques among industrial managers.
iv. Plan developed to strengthen import quality control procedures.
v. Improved awareness on ISO 22000, WRAP, SA 8000 and OHSAS 18000 standards among industrial managers.
vi. Cost reduction of the quality management system certificate and increase in the number of companies with QMS certificates.

Outputs

Output 4.1 Product certification system of NBSM complies with the ISO Guide 65 and is accredited internationally.

Output 4.2 Plan for quality control of imported goods developed.

Output 4.3 Textile laboratory of NBSM strengthened and accredited.

Output 4.4 Food laboratory of the DFTQC strengthened and accredited.

Output 4.5 Between 15 and 20 auditors trained for ISO 22000 Food Safety Management System and two companies certified.

[2] This is included in the Progress Report and in the revised logframe of August 2010 but not in the Project document.

Output 4.6 Management System Certification Body of Nepal accredited.
Output 4.7 Awareness created about SA 8000 and OHSAS 18000 standards.

2. PROJECT CONTEXT

2.1 Project context at the start of the project

This project is a follow up to Phase I which was implemented from 2002-07. Phase I was targeted at the LDCs in South Asian Association for Regional Cooperation (SAARC) i.e. Bangladesh, Bhutan, Maldives and Nepal. The other members of SAARC are India, Pakistan, Sri Lanka and Afghanistan[3].

The initial project was introduced to assist the LDCs in strengthen their STMQ infrastructure in order to facilitate intra SAARC trade and in particular trade between the LDCs and the larger SAARC members i.e. India, Pakistan and Sri Lanka. This intervention was in response to the decision at the SAARC summit in January 2002 to finalise a draft free trade agreement (FTA) by the end of 2002. The effective and efficient functioning of a FTA requires the harmonisation of standards, technical regulations, SPS measures as food safety standards and the harmonisation and/or mutual recognition of conformity assessment procedures to eliminate technical barriers and other non-tariff barriers (NTBs) to intra SAARC trade. It also requires an effective STMQ or national quality infrastructure that is internationally recognised to deliver conformity assessment services at competitive cost to exporters to facilitate intra SAARC trade.

2.1.2 Regional

SAARC was founded in December 1985. Its Secretariat is headquartered in Kathmandu, Nepal. The main objectives of SAARC are to place regional cooperation on a firm foundation, accelerate the pace of social and economic development of the countries, and further the cause of peace, progress and stability in the region. Progress towards these objectives has been slow. An 'Agreement on SAARC Preferential Trading Arrangement' (SAPTA) signed in Dhaka on the 11th of April 1993 aimed at tariff liberalisation. This was superseded by the 'Agreement on South Asian Free Trade Area (SAFTA)' which was signed in 2004 and entered into force on 1st January 2006. SAFTA is scheduled to become fully operational by 2016. The SAFTA is aimed at facilitating growth in intra SAARC. In 2004 over 90% of the imports by SAARC countries were sourced from outside the region and a major part of SAARC exports went also to third countries.

SAARC established the Committee on Economic Cooperation (CEC) in 1991 to identify and implement programmes to facilitate regional economic cooperation. Standing Group on Standards, Quality Control and Measurement (SQM) was set up in 1998 as a Sub-Group of the CEC but rarely met and little was accomplished in this area at regional level during the time frame of the Phase I of the project.

[3]Afghanistan joined in 2007 and is also an LDC but was not included in the intervention.

In August 2006 the SQM at its 2nd meeting the SQM decided to set up the SAARC Standards Coordination Board (SSCB) as a precursor to setting up of the SAARC Regional Standards Body. The SSCB is comprised of a member from each of the National Standards Body (NSB) of the Member States. In November 2007 the SSCB recommended setting up the SAARC Regional Standards Body to be formally named as the South Asian Regional Standards Organization (SARSO).

2.1.2 LDCs

BANGLADESH

In 2006 Bangladesh was a low income LDC with a population of 144.3 million of which 50% lived below the poverty line. It was considered by donors to be a fragile state, with unstable politics (characterised by violence and confrontation), limited state capacity, and weak governance. Despite these constraints the economy had grown by 5-6% a year since the early 1990s supported by export-oriented manufacturing, inward remittances and the service sector. GDP in 2006 was US$61.9 billion and the growth rate was 6.6 %. However in order to meet the Millennium Development Goal (MDG) of halving the number of people in poverty by 2015 Bangladesh needed to achieve an annual growth rate of 8%. The prospects of achieving this were constrained by significant and chronic energy shortages and inadequate infrastructure, organizational, managerial and administrative inefficiencies, poor governance in government Ministries and agencies, a weak regulatory framework and inadequate enforcement of existing legislation. A further weakness was a high degree of concentration of exports: over 80% of export earnings were derived from clothing and the US and EU markets accounted for more than 85% of total exports. . Moreover the sustainability of the textile sector was constrained by a lack of adherence to core labour, environmental and corporate social responsibility standards. The export competitiveness of Bangladeshi products was also impeded by poor quality infrastructure which did not operate to international standards or deliver internationally recognised conformity assessment services required for access to international markets.

- ***Quality Infrastructure***

BSTI was established in 1985 and functioned through six wings i.e. Standards Wing, Certification Marks Wing, Chemical Testing Wing, Physical Testing Wing, Metrology Wing and Administration Wing. The Wings covered all of the components of the national quality infrastructure with the exception of an accreditation body. The Standards Wing acted as the NSB and had developed about 3000 Bangladesh standards (BDS) many of which were harmonised with international standards including Codex Alimentarius Commission (CODEX) standards. 155 standards were applied on a mandatory basis. The BSTI Certification Wing offered product certification to BDS with entitlement to use the BSTI Certification Mark but its Product Certification Scheme (PCS) was not accredited to ISO Guide 65 'General requirements for bodies operating product certification systems'. The Chemical Testing Wing provided laboratory testing services for non-food products and its Food Testing Chemical and Microbiological laboratories offered testing services for food

products. The Physical Testing Wing had an electrical testing laboratory, a meter testing laboratory, building materials testing laboratory, and jute and textile testing laboratory. However none of the laboratories were accredited to ISO/IEC 17025 'General requirements for the competence of testing and calibration laboratories'.

BSTI also maintained a legal and industrial metrology laboratory as the National Metrology Institute (NMI) which in was being upgraded with support from the EU NORAD and UNIDO Bangladesh Quality Support Programme (BQSP) to meet the requirements for accreditation to ISO/IEC 17025. The objective was to enable BSTI as the NMI to provide legal metrology and industrial calibration services to industry and to scientific and testing laboratories for number of physical measurement parameters covering: mass, length & dimension, temperature, volume & density, viscosity, pressure & force, time and frequency. The BQSP had been in place since January 2006 and was also providing TA to BSTI to strengthen its capacity in product certification in accordance with ISO/IEC Guide 65. It was also providing TA to the MoI to establish a Bangladesh Accreditation Board (BAB) as an independent Accreditation Body (AB).

Outside of BSTI the quality infrastructure for the agri-business sector was underdeveloped. There were no local chemical or microbiological testing laboratories accredited to ISO 17025 for food products although these services could be sourced overseas through the local offices of international companies such as Bureau Veritas and Intertek. There was also no local provider of product certification services or management system certification (MSC) services although again these could be sourced from Bureau Veritas who has started to build local capability for these services since 2003.

In the textile and apparel sector internationally recognised laboratory testing services were available from international companies such as Intertek and Bureau Veritas with local and overseas laboratory testing capacity or from in house laboratories set up by international textile and apparel companies with factories in Bangladesh. However the Government of Bangladesh (GoB) and the industry associations were concerned that the costs of laboratory testing services were too high and represented a barrier to entry to the industry and to export markets for local small and medium sized entreprises (SMEs).

The regulatory framework for food products was under developed and required updating in line international norms and standards particularly in relation to the use of HACCP food safety risk management system or to the application of minimum residue limits (MRLs) for pesticides, veterinary drug residues and contaminants. This included both the legislative framework and the institutional and administrative procedures necessary to ensure compliance with the legislation. An exception was the regulatory framework for the export of fishery and aquaculture products to the EU which was in the process of being updated with the support of the BQSP to comply with the EU regulatory framework to maintain market access to the EU markets.

Market surveillance of food and non-food products was effectively limited to BSTI surveillance of compliance to mandatory product certification.

BHUTAN

Bhutan is a small kingdom in the eastern Himalayas. The country is landlocked and bordered by India and China. Its population in 2005 was of 634,500 in an area little more than the size of the Netherlands Despite the difficult terrain and a widely dispersed population Bhutan made rapid socioeconomic progress in recent decades. Annual GDP growth averaged 6.8 per cent from 2000-06 and per capita GDP rose from USD 782 to USD 1,424 in the same period. Hydropower development and the export of surplus electricity to India was the key driver of the robust growth which transformed the structure of Bhutan's economy.

In 2007 Bhutan's Ninth Five-Year Plan (July 2002 to June 2008) was under implementation and constituted the basis for the country's Poverty Reduction Strategy. Despite Bhutan's impressive growth the country faced a number of constraints and challenges. According to the 2004 Poverty Assessment the national poverty rate was 38 per cent in the rural areas and 32 per cent nationally. The harsh mountainous terrain and the highly dispersed patterns of settlements greatly escalated the development costs.

Agriculture, forestry and livestock accounted for 21 per cent of GDP in 2006. Hydropower accounted for 11 to 12 per cent of GDP but was expected to increase dramatically to about 25 per cent once the Tala Hydropower Project came on stream in 2007. In addition to the construction of this and other large hydropower projects a rapid extension of road networks, including feeder roads to improve rural access, electricity and telecommunications facilities for numerous rural households, and further development of urban infrastructure was under way. It was expected that the expansion of hydropower capacity would continue and that electricity production and associated construction would remain the fastest-growing sectors of the economy in the years to come.

India was Bhutan's largest trading partner accounting for 90 percent of Bhutan's exports 75 percent of its import[4]. Exports consisted of electricity, fruit timber, spices and gemstones. Electricity accounted for 45 per cent of exports which was expected to increase in the future. Other exports included fruit, spices processed foodstuffs, and gemstones. Imports consisted primarily of petroleum products, machinery and vehicles. Bhutan had an FTA with India and fixed exchange rate with the Indian rupee. Due to Bhutan's landlocked position and the difficult terrain which prevented road transport access to China, access to India's large market was considered a vital an asset for Bhutan given its small domestic market.

Bhutan's development was and continues to be guided by an original philosophy based on the concept of Gross National Happiness which strives to balance spiritual and material advancement through four pillars: sustainable and equitable economic growth and development, preservation and sustainable use of the environment, preservation and promotion of cultural heritage and good governance.

[4]Trade with China was restricted by the difficult terrain in the border areas with Tibet.

A draft Constitution was prepared in 2005 for adoption by the National Assembly in 2008 when it was intended to hold the first ever parliamentary elections to set up parliamentary democracy in Bhutan.

- ***Quality Infrastructure***

The national quality infrastructure in Bhutan was under developed. The SQCA under the Ministry of Works and Human Settlement (MWHS) and were responsible for controlling the quality and safety of Government buildings, roads, and construction materials. SQCA was established in 2000 and operated basic laboratories for testing of building materials. Bhutanese standards technical regulations required that construction materials meet Indian standards (IS) as there were no Bhutanese standards in place. As Bhutan was planning to join the WTO the SQCA was tasked to establish a WTO Enquiry Point. SQCA has recently been appointed as NSB for Bhutan but had little or no capacity in standards formulation and development at that time.

Legal and industrial metrology was also under developed. The SQCA was in process of setting up a legal and industrial metrology laboratory and has received basic equipment under Phase 1 of the project. There was no local provider of calibration services. The MTI was responsible for weights and measures inspection or the legal metrology system but its capacity in this area was rudimentary as best.

The BAFRA's National Quality Control Laboratory (NQCL) was the only testing laboratory providing laboratory testing services for food products. However its capacity was limited and it needed technical training and equipment to provide services to the international standards required for accreditation to ISO 17025 and wider access to export markets.

There were also no local providers of product certification or MSC services although these could be readily sourced from Indian providers.

The regulatory framework for food products was under developed and required updating in line international norms and standards particularly in relation to the use of HACCP and the application of MRLs to pesticides, veterinary drug residues and contaminants. This includes both the legislative framework and the institutional and administrative procedures necessary to ensure compliance with the legislation.

Market surveillance of non-food products was effectively limited to SQCA now BSB surveillance of construction products which were required to comply with IS. BAFRA has responsibility for market surveillance of food products but did not carry any activity in this regard.

THE MALDIVES

The Maldives is an archipelago of about 1,200 small coral islands of which only 200 are inhabited islands. The island nature and small size of its economy makes it

vulnerable to external shocks. In 2006 its population was about 290,000 people. Despite the natural disadvantages, the country averaged 7 percent GDP growth between 1994 and 2004 driven by growth in tourism and fisheries.

Tourism had grown significantly from 195 000 arrivals in 1994 to 617 000 in 2004 and in accounted for 33 percent of GDP and 25 per cent of total employment. Fisheries accounted for 6-7 percent of GDP. Fish landings had increased from 100,000 MT in 1996 to 160,000 MT in 2004 and employed about 19 percent the labour force. Fresh, chilled or frozen tuna accounted for 86 per cent of the volume of fish exports, while dried fish comprised 6 percent, canned fish, 4 percent and salted fish, 2 percent. The principle export markets were the EU, USA, Japan, Hong Kong and Thailand. A small cottage industry also exported salted fish to Sri Lanka.

The industrial sector accounted for only about 9% of GDP. Traditional industry consisted of boat building and handicrafts, while modern industry was limited to a few tuna canneries, five garment factories, a bottling plant, and a few enterprises in the capital producing PVC pipe, soap, furniture, and food products. The production of garments was on the decline since the ending of the WTO Multi-fibre Agreement (MFA) in 2005.

Despite the growth a large part of the population were living in poverty mainly as a result of regional disparities in living conditions due to the remoteness of the islands and the lack of infrastructure and social services in the atolls.

As a result of its economic success in previous the Maldives graduated from LDC status in 2004 but the United Nations (UN) allowed a grace period for the status to continue to 2011. However the tsunami of December 2004 caused extensive damage to the economy which was estimated at 62% of GDP or $470 million. The economy contracted by 4.6 percent in 2005, with tourism revenues falling by 33 percent. It recovered swiftly in 2006 with the tourism sector achieving 42 percent growth.

Overall GDP growth reached an all-time high of 18 percent. The fishing industry also

recorded its highest catch at 180,981 metric tonnes in the same year.

The political system was unstable due to disagreements on the agenda of the President to create a multi-party democracy.

- ***Quality Infrastructure***

The STMQ infrastructure was underdeveloped in the Maldives particularly in regard to standardisation and metrology. The MSMC was established in 2006, with UNIDO support under Phase I of the project, in the International Trade Policy Division of the MED. Its responsibilities included standards formulation and development, operating a WTO National Enquiry Point as stipulated under the WTO TBT Agreement, maintaining reference measurement standards for weights and measures and enforcing the Weights and Measures regulations of the Maldives. However it had

limited capacity in human resources or equipment to carry out its responsibilities effectively. UNIDO provided TA and legal metrology laboratory equipment during Phase I of the project and also assisted draft a Weights and Measures regulation which has still not been enacted.

The National Health Laboratory (NHL) in MFDA under the Ministry of Health and Family (MoHF) was the only provider of chemical and microbiological laboratory testing services for food products including fish in the Maldives. The MFDA was the competent authority for certification of fish products to the EU. Its food testing laboratory was adequately equipped and staffed and was accepted by the EU authorities as a reference laboratory for the export of fish to the EU. It had received support from the World Health (WHO) and UNIDO. The Laboratory has already been established and has fulfilled the requirements for accreditation for some tests. However certain equipments, resources and training are required for further tests to be accredited

There were no providers of product certification or MSC services although these could be sourced from providers in India and Sri Lanka.

The regulatory framework for fishery products was generally in accordance with the EU regulatory framework and fish products were approved for export to the EU. The EU Food and Veterinary Office (FVO) in their report in 2006 noted some minor exceptions in relation to the official controls in place (from the testing of FP/water/ice, to the registration of fishing vessels and the supervision/listing of establishments/factory vessels) are not equivalent to the Community requirements. However the MFDA has given the EU FVO assurance that an action plan was in place to address these issues.

The regulatory framework for other non- food products was under developed and required updating in line international norms and standards particularly in relation to the use of HACCP and the application MRLs in relation to pesticides, veterinary drug residues and contaminants.

The MFDA systematically carries out market surveillance of food products was not carried out.

NEPAL

Nepal is a landlocked LDC in the Eastern Himalayas bordered by China and India. In 2006 it had a population of about 27 million of which 88 per cent of which lived in rural areas. In period 1992 -2002 Nepal's annual GDP growth averaged about 4-5 percent, but declined in period 2002-2006 as a result of the political instability following the intensification of the violent insurgency in the country. The successful people's revolution in April 2006 and the Comprehensive Peace Accord signed in November 2006 restored peace but its impact on growth was limited with GDP reaching only about 3 per cent per annum in 2006-07.

The Nepalese economy was one of South Asia's most open and trade-dependent economies. The economy was characterised by a large rural sector based on subsistence agriculture and small industries focused on manufacturing activities and tourism. In 2005-06, total GDP in amounted to about USD 8 Billion of which agriculture, fisheries and forestry accounted for about 35 per cent of GDP. Up to 80 per cent of the population are directly involved in agriculture. Industry accounts for about 17 per cent of GDP and is focused on exports.

Tourism was also a key economic sector for Nepal but visitor numbers has fallen dramatically. Visitor arrivals rebounded in early 2007 but were still far below the peak level of 495,000 arrivals reached in 1999. Water and hydroelectricity potential were the most important natural resources but are under developed

Total trade reached approximately USD 3.0 Billion in 2005-06. Exports consisted mainly of textiles, garments, pashmina, carpets, chemicals and food products and agricultural commodities. However export of textiles garments and pashmina were in decline following the ending of the WTO MFA at the end of 2004. Manufactured goods account for about 70 percent of total exports, followed by agricultural goods at about 21 percent and chemicals and drugs at 9 percent. India is major trading partner in agricultural products in terms of export taking about 80 per cent of Nepalese exports. This is followed by the EU and USA at about 12 percent each. The Government of Nepal (GON) was actively encouraging organic production of tea, honey and vegetable ghee.

The political climate remained unstable. The interim government was formed in early April 2007. Elections were due to be held in 2008 for the Constituent Assembly which would decide the fate of the monarchy and prepare a new constitution to replace the existing 1990 Constitution by 2009.

- ***Quality Infrastructure***

The NBSM was established in 1988 through a merger of the Nepal Bureau of Standards (NBS) merging Department of Weights and Measurement in the Ministry of Industry (MoIN). Similarly to BSTI in Bangladesh NBSM's functions covered all the institutional components of a national quality infrastructure but did not operate the international standards required by exporters for market access.

The NBSM was the NSB and had developed around 800 national standards by 2006 focussing on national priorities such as industrial development, community welfare, safety and health of its citizens. Out of these standards only six standards relating to safety and export trade were mandatory. The other standards were voluntary.

The NBSM implemented a voluntary product certification scheme which also licensed to use Nepal Standard Certification Mark (NS). By 2007 126 industries covering fifty five categories of products had received licenses. The NBSM was also planning to develop a MSC scheme (MSCS).

The NBSM operated the Nepal Laboratory Accreditation Scheme (NEPLAS) which accredited local testing laboratories. In this regard the NBSM had developed

laboratory accreditation criteria against which the laboratories are accredited in line with ISO/IEC 17025. However NEPLAS's mandate and operational procedures were not in accordance with ISO 17011 necessary for international recognition and peer approval and entry to Asia Pacific Laboratory Accreditation Cooperation (APLAC).

The NBSM had fifteen testing laboratories which offered testing services for a wide range of products including foodstuffs, textiles, chemicals, construction materials and products, petroleum products and paints. It was providing testing services to industry, trade and general public. However none of the laboratories, including the textile laboratory were internationally recognised and accredited to ISO 17025. NBSM had also established two regional laboratories in industrial zones which were intended to provide quality control services laboratories to SMEs but were inadequately equipped.

NBSM was designated as the NMI. While it's legal and industrial metrology laboratory was equipped with one primary standard in mass and secondary standards in length, pressure, density and temperature international traceability was not clearly established and it was not accredited to ISO 17025. It was nonetheless providing calibration services to the industries and laboratories. Nepal is not a signatory to the Convention of the Metre (*Convention du Mètre*) that created the International Bureau of Weights and Measures (BIPM) and is also not an associate member of the General Conference on Weights and Measures (CGPM). Substantial assistance is required both for equipment and training to enable it to offer internationally recognised calibration services to testing laboratories and industry. It was expected that EC-Nepal WTO Assistance Program scheduled to be launched in 2007 or early 2008 would provide this TA.

The Food Laboratory in DFTQC in the Ministry of Agriculture and Cooperatives (MOAC) was the principle local provider of laboratory testing services for food stuffs in Nepal. However it was not internationally recognised and needed strengthening in respect of equipment and technical expertise to enable it to meet the requirements of ISO 22000. It has already received support from the World Bank and the Japan International Cooperation Agency (JICA) to build a new building for laboratories and some technical training TA from World Health Organisation (WHO) but need substantial additional TA to enable it to operate to international standards. It was expected that EC-Nepal WTO Assistance Program noted above would provide TA to the DFTQC for this purpose.

There were no local provider of internationally recognised laboratory testing services, product certification services, or MSC services although these could be sourced in India from international and Indian companies. DFTQC was planning to introduce an organic product certification system based on international standards.

The regulatory framework for food products was under developed and required updating in line international norms and standards particularly in relation to the use of HACCP and the MRLs in relation to pesticides, veterinary drug residues and contaminants. This includes both the legislative framework and the institutional and administrative procedures necessary to ensure compliance with the legislation.

The DFTQC carried limited surveillance of food products in consumer markets.

2.2 UNIDO Positioning

UNIDO is the specialized UN agency supporting the industrial development of developing countries and economies in transition. UNIDO has over 40 years of global experience on issues related to industrial upgrading as well as in developing infrastructure for SMTQ and in supporting agro-industries in developing countries. UNIDO's TCB programs are recognized as a good model for the implementation of the Aid for Trade initiative since 1997 UNIDO has provided a range of technical assistance (TA) to support developing and strengthening national quality infrastructure in developing countries. This included support to developing countries to establish standardisation institutions and metrology and testing facilities. In 1999 UNIDO recognising the growing importance of SMTQ in the emerged globalised setting, established a special technical branch "Quality, Standardisation and Metrology" to strengthen its own institutional capacity for supporting developing countries in this area. This unit consisted of professional staff with the requisite engineering and business knowledge who worked in industry and international metrology and testing laboratories The TCB Branch was created in 2007 as a successor to the Quality, Standardisation and Metrology branch.

This UNIDO project was designed to enhance the capacity of the 4 targeted LDC countries as a whole to participate in international trade, mainly through (1) the enhancement of enterprises' capacity to produce according to international market requirements and through (2) the strengthening of export-oriented support services, mainly relating to conformity assessment. In particular, the project was designed to enhance the institutional capacity and services of the participating countries to implement the WTO agreements on TBT and SPS. It was expected that regional trade capacity building and harmonization will lead to better access to industrialized markets and facilitate intra an extra SAARC trade.

2.3 Changes in context since project inception

2.3.1 Regional

SAARC has made some progress towards putting a structure in place for the development of regional harmonised standards. The Agreement on the Establishment of SARSO was signed by the Heads of State on the 3rd August 2008. It was subsequently ratified and entered in to force on 25th August 2011. SARSO is based in Dhaka, Bangladesh and operates out of the BSTI premises until a new building is constructed for its use. SARSO objectives are:

- To promote and undertake harmonization of national standards of the SAARC Member States with a view to removing TBT and facilitate flow of goods and services in the region
- To develop SAARC standards on the products of regional/sub-regional interest
- To encourage the use of international standards published by ISO, IEC, etc. by way of adoption, where appropriate, as SAARC Standards

- To promote and undertake harmonization of national standards of the SAARC Member States with a view to removing TBT and facilitate flow of goods and services in the region
- To develop SAARC standards on the products of regional/sub-regional interest
- To encourage the use of international standards published by ISO, IEC, etc. by way of adoption, where appropriate, as SAARC Standards
- To encourage exchange of information and expertise among the NSBs of the Member States in the fields of Standardization and Conformity Assessment
- To facilitate capacity building among the Member States in the fields of Standardization and Conformity Assessment by way of training, workshops, seminars, etc
- To act as a source of information for the Member States on standards, regulations, conformity assessment
- To present the common interests of the Member States in the various international standardization organisations and
- To establish Sectoral Technical Committees (STC) as and when deemed necessary for development of harmonised standards.

SARSO adopted a sector based approach adopted for harmonization and or development of SAARC standards and set up the following Sectoral Technical Committees:

i. Food and Agricultural Products
ii. Electrical, Electronics, Telecoms and IT
iii. Jute, Textiles & Leather
iv. Building Materials and
v. Chemical and Chemical Products

Twelve products were identified for harmonization and or development of SAARC Standards and work has commenced. There are: sugar, skimmed milk powder, biscuits, instant noodles, vegetable ghee, electric cables, textile fabric, jute, cement, steel tubes, structural steel, and toilet soap. Consideration is also currently been given to the relevant national standards on food hygiene in SAARC Region with CODEX Standards.

The First Meeting of the Governing Board of SARSO was held in Bangladesh in December 2011. It was agreed that all standards finalised by SARSO will have a distinct identity and may be known as SAARC Regional Standards (SARS) with a specific number like SARS 0001. However no substantive work has yet been undertaken by SARSO on the harmonisation and development of regional standards to date.

SARSO is also currently drafting the ‘SAARC Agreement on Implementation of Regional Standardsand ‘SAARC Agreement on Multilateral Arrangement on Recognition of Conformity Assessment’.

SARSO has also decided to establish a SAARC Expert Group on Accreditation. The first meeting is expected to be held in 2012.

UNIDO-EU agreed to give support to SARSO under EU UNIDO SAARC Harmonization of Standards and Conformity Assessment System component in the EC – SAARC Programme of Economic Cooperation (ESPEC) when it was set up in 2007. However the SAARC Secretariat found it difficult to transfer resources to UNIDO and as a result the project never took the ground off.

2.3.2 LDCs

BANGLADESH

Bangladesh's GDP growth was resilient during the 2007-09 global financial crisis. The GDP growth rate fell from 6.3 percent in 2007 and to 4.5 percent in 2008 but rose again in 2009 to 5.7 per cent and has averaged 6 per cent since. It was partly buoyed by garment exports totalling USD 12.3 billion in 2009 which accounted for almost 15 per cent of GDP.

The development constraints remain unchanged. The political climate is still unstable and while the business climate has marginally improved the impetus to implement structural changes necessary to improve competitiveness has slowed almost to a halt.

BHUTAN

In 2008, Bhutan transitioned smoothly from an absolute monarchy to multi-party democracy. His Majesty King Jigme Khesar Namgyel Wangchuck is the nominal head of state. Executive power resides in the government led by the Prime Minister. Good governance has been a continued priority for the Royal Government. Bhutan stands out in the region with overall low levels of corruption and robust institutions to support transparent governance.

The 10th Five Year Plan (2008-2013) was launched. It was developed in accordance with the RGoB development policy set out in 'Bhutan 2020: A Vision for Peace, Prosperity and Happiness' (May 1999). The priority for the Tenth Plan included the strengthening of food safety standards, quality assurance, inspection and certification, as well as developing laboratory services in the food processing sector with specific targets set for the use of commodity standards and use of HACCP. It also sought to boost economic growth significantly through increased market orientation, enhanced export capabilities and competitiveness and active private sector engagement.

Annual real GDP growth reached over 12 percent in 2007 and 2008 as the Tala hydropower project came on-stream and increased Bhutan's power generation capacity. However, external shocks from floods caused by Cyclone Aila in May, an earth quake in September and a 20 per cent decline in tourism numbers (as a result of the global financial crisis) caused economic growth to slow in 2009 to 5.9 as Tourism recovered in 2010 percent and GDP rose at about 6.7 percent. It is expected to average an annual growth rate of 6.5 percent in the period 2011- 2014.

THE MALDIVES

The economy grew by 7.2 and 6 per cent in 2007 and 2008 but contracted in 2009 by 4.8 percent as tourist numbers fell in response to the global recession and a continued decline in fish processing. Tourism rebounded in 2010 pushing GDP growth to 8 percent. Tourism growth continued into 2011 but the fishing sector acted as drag on growth and GDP fell slightly to 6 percent.

Fish landings have declined continuously since 2006 and in 2010 were only about only 60 percent of the record numbers recorded in 2006. The causes of the drop in numbers were poorly understood. Higher world prices for tuna since 2010 has reduced the economic impact of the lower landings.

A new Constitution was ratified in August 2008, paving the way for the country's first multi-party presidential election two months. However the political environment remained unstable.

NEPAL

The economy continued to suffer from political uncertainties. Economic activity remained adversely affected by political uncertainties, the poor law and order situation, militant labour problems, and other governance issues. Real GDP growth averaged 5 per cent from 2007-10; the agriculture sector averaged 3.4 per cent, the industry sector averaged 1.2 per cent and the services sector 5.8 per cent. Growth slowed to 3.5 percent in 2011 and is likely to remain below 4 in 2012 mainly as a result of a weakened service sector due to a reduction in remittances from overseas workers probably due to difficult global economic environment.

Garment exports have continued to fall since ending of the WTO MFA in 2005 and as a result of the unstable situation in Nepal. However exports of Pashima, a high value added product reversed the trend in recent mainly as a result of legal action worldwide by the Nepal Pashmina Industries Association (NPIA)to protect the Pashmina patent and register it in key markets beginning in Japan and Australia. Exports of Pashmina have risen from Rs 540 million in 2001 to Rs 1.64 billion in 2011 and are expected to grow significantly again in 2012.

3. PROJECT PLANNING

3.1 Planning strengths

3.1.1 Long term approach

The Project at the outset in Phase I adopted in long term approach in agreement with the donor to the provision of technical assistance to support the development of the regional and national SMTQ or quality infrastructure in the SAARC LDCs and ensure coordination with other donors. Phase I was designed to lay the groundwork for a second phase and help fine tune its design. This reflects an understanding by UNIDO and the donor that the development of national quality infrastructure requires a

comprehensive approach and long-term efforts and alignment with country needs and coordination with other donors enhances effectiveness. This approach was identified as a KSF in project design and implementation in the Thematic Evaluation Report on 'UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ)[5].

3.1.2 Regional and South-South approaches to SMTQ development

The focus on strengthening of both regional and national SMTQ institutions in parallel recognized that a minimum national quality infrastructure is required to make a regional quality infrastructure. This is a planning strength despite the fact that to due the slow development of the SAARC regional institutions, notably SARS), the primary focus was on the development the national SMTQ institutions.

The use of Indian expertise to build capacity in metrology and in the calibration and testing laboratories also underlines the South-South approach adopted. The regional and south-south approach was also noted as a KSF in the Thematic Evaluation Report on 'UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ)[6]

3.2 Planning weaknesses

As well as the design strengths noted above there were also a number of design weaknesses. While these are discussed in the following sections it is important to note that the outset that despite these weaknesses the project was effective and has delivered significant benefits to the targeted stakeholders and beneficiaries. The issues are outlined in detail to advocate a systematic application of LFA in future project design to increase the effectiveness of project design rather than question the overall effectiveness of this project.

3.2.1 Problem identification and analysis.

Although implicit in the project document for Phase II the problem addressed by the intervention was not clearly identified. It was implied in the Development Objective as constraints to the industrial development and export capabilities of Bangladesh, Bhutan, Nepal and Maldives' caused by technical barriers to trade resulting from weaknesses in the 'institutional structures and national capacities in standards, metrology and testing, quality and conformity assessment. While this is broadly correct the analysis in theory and applied of where the weaknesses in the various components exist, their relative importance or what the optimal solution is in each country could have been stronger and more in depth.

A principal source of technical barriers to trade was not directly addressed in the problem analysis or project design i.e. the regulatory frameworks for food and non-food products. Technical regulations and SPS measures are based on national and international standards and there is often an overlap with standards. However technical regulations and SPS measures can be introduced by reference to

[5] Thematic Evaluation Report on 'UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ), Bennett, B ;Keller, D & Loewe P; UNIDO, Geneva, 2010.
[6] Ibid footnote 5.

international standards such as ISO, IEC and CAC standards without reference to national standards and there was precedence in the EU and elsewhere for this approach.

The problem analysis at regional level and in each country was weak. Key strengthens and weaknesses of the national quality infrastructure were not analysed in detail. At a regional level There was insufficient analysis of how perceived weaknesses translate into technical barriers to trade or other NTBs or what the optimal solution was to eliminate them. Specific NTBs in intra and extra SAARC trade are not identified although the project is predicated on reducing them. At national level an assumption was correctly made that the problems in relation to the inadequacy of the institutional structures for standards, testing and quality control were similar in nature in each country and a common solution was proposed with modifications for each national context. However no assessment was made to prioritise or sequence the intervention to minimise the time frame within which an impact could be triggered and benefits maximised to the stakeholders. For example strengthening the testing laboratories and the regulatory framework to enable the provision of internationally recognised conformity assessments services should be prioritised over strengthening standardisation in an intervention with limited resources as it is likely to generate an impact in export performance sooner than improving capacity in standards formulation.

Problem analysis generally includes an overall assessment of the level of intervention required to address the problem and an estimate of how of this can be provided and to what extent it can be provided within the resources of the project. Ideally it also includes consideration of alternative approaches and identification of an optimal solution, particularly where significant operating costs will be incurred by the beneficiary to ensure sustainability once the intervention is completed. This process was not followed in the project design. The costs and benefits to each country were not assessed. For example was it necessary for small countries like Bhutan and the Maldives to establish and maintain expensive standardisation and metrology institution and infrastructure or would it have been more cost effective to establish close cooperation with similar institutions in neighbouring countries like India and Sri Lanka to provide the services either as long term solution or an interim solution. In general small developed countries such as Ireland where demand for some calibrations and testing laboratory services is not sufficient utilise the quality infrastructure services of larger neighbours. In this case it more cost effective to outsource the services rather than build local capacity to provide them. See also sections 3.4.3 and 3.4.4.

3.2.3 Stakeholder analysis at regional & national level

While extensive consultations were held with stakeholders prior to and during implementation of Phase I, problem analysis and stakeholder analysis workshops in which all stakeholders participated to assess the problem and propose a solution within an a logical framework were carried out in each country prior to or during Phase I. These workshop could have included identification and mapping of the various institutional components in the public and private sector. As a result it was difficult to assess the effectiveness of the design in terms of the extent to which the

problem was addressed by the intervention. For example a detailed stakeholder analysis could have provided more information to understand why workshops WRAP, SA 8000 and OHSAS 18000 were prioritised over more intensive support to the adoption of HACCP or to the development of audit capacity in HACCP in the Competent Authorities (CAs) in the agri-business sector. Similarly it could have revealed the size of the demand for testing services and the existing capacity to meet this demand and thus enabled at least a qualitative estimate of the potential impact at the outset which could have been used to optimise the effectiveness of the project design.

3.2.4 Cost benefit analysis

The initial planning did not include either a short term or long term cost benefit analysis of the intervention. It did not assess if the beneficiaries could afford to maintain and operate the infrastructure post intervention. The project included a requirement for the beneficiaries to develop sustainability plans for calibration and testing laboratories and certification bodies which highlighted operational costs and revenue flows but it did not raise the question of whether the infrastructure and operating costs were affordable. It did not extend the analysis and requirement for sustainability plans to the establishment of NSB or metrology centres. This analysis could have benefited the small LDCs such as Bhutan and the Maldives who do not enjoy the economies of scale of Nepal and Bangladesh. The lack of economy of scale greatly increases the costs of operating and maintaining quality infrastructure.

3.2.5 Project Context

The project context in the project document was not sufficiently elaborated to allow a detailed qualitative or ideally quantitative assessment of the outcomes or impact of the project. While the availability of reliable data is a challenge the project could have made greater use of the UNIDO and other donor databases. For example if a proposed intervention included testing laboratory strengthening and accreditation the justification should include at least qualitative estimates of the demand for laboratory testing services in the particular industry sector, and the market share the laboratory is likely to achieve after the intervention. This would have allowed an estimate of impact at the design stage of the intervention which could be used in the design to prioritise and sequence activities and results areas in the intervention and used a benchmark for impact assessment.

3.3 Design strengthens

3.3.1 Sustainability plans

The requirement for the testing laboratories and certification bodies to prepare sustainability was a key strength of the project design as it focused management's attention not only on their operating margin and cash flows but also on key sustainability criteria in the testing laboratories i.e. on the need to have sufficient competent staff, adequate supply of consumable and effective facility and equipment maintenance plans in place. This requirement contributed to the sustainability of the intervention. It also partly implements part 4 of Recommendation 4 of the Thematic

Evaluation Report on 'UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ)[7]

3.4 Design Weaknesses

3.4.1 Scope of Project

The scope of the project was too wide given the parameters of the problem that was being addressed and the limited financial resources available to the project for use in 4 countries over a 4 -5 year period. The project tried to cover too many areas and as result the resources were spread thinly. A narrower more focused approach on key outputs such as deliver of conformity assessment services in a single sector could have achieved the targeted outcomes in a narrower time frame without the need for additional TA to ensure sustainability. This in turn could have generated a potential impact earlier than is now likely to happen. The benefits to stakeholders would be correspondingly higher as longer time frames represent an opportunity cost to both the providers of conformity assessment services and their customers.

The scope should not have been extended to include 'Plan developed to control substandard and hazardous imported products'. This should have been addressed separately given the scope of this problem, the extensive resources necessary to address it and the fact that it was never the intention to implement the plan within Phase II. If UNIDO perceived the problem posed a significant risk to the competitiveness of the domestic industry from sub-standard imports or to the health of consumers it should have prioritised it as a separate intervention.

A narrower supply chain approach focused on strengthening the quality infrastructure of the agri-business sector to enable it to provide internationally recognised conformity assessment services and reduce technical barriers to intra SAARC trade was likely to more been effective than the broad approach adopted particularly in Bangladesh and Nepal where extensive TA was already being provided or planned by the EU and other donors to the textile and readymade garment sector (RMG) at the time the project was designed.

3.4.2 Demand driven

The inclusion of demand driven activities and outputs can be design strengths where their contribution and importance to the achievement of the overall objective is clearly established. Where this is not the case their inclusion can be a design weakness and incur an opportunity cost as it uses scarce resources which could be applied elsewhere to strengthen outcomes and sustainability. A number of the activities and outputs appeared to have been included in response to counterpart requests rather than to the importance of their contribution to the overall objective. For example the inclusion of an output to develop national capability for training in quality management in Bangladesh and Nepal given the course content and target audience was more appropriately addressed as part of curricula design in a project to support capacity strengthening in 3rd level institutions. While the output included management training as well curricula development it was not integrated into the 'quality' aspects

[7] ibid footnote 5.

of the project's other outputs which weakened its sustainability and contribution to the overall objective.

3.4.3 Non-tariff barriers

Although the project was introduced to facilitate market access in intra SAARC trade by reducing barriers to trade the project did not include activities or outputs targeted at identifying and eliminating specific barriers to trade arising from trade related TBT technical regulations, SPS measures, food safety standards, conformity assessment procedures etc. While the project's outputs will create an enabling environment for the reduction of NTBs in the future the omission of specific activities to address them weakened the contribution of the project of facilitating intra and extra SAARC trade. Additional TA will be required in the future to ensure the NTBs are eliminated.

3.4.4 Product Certification for export

As noted above the optimal solution to enabling market access for exporters is to support capacity building in the provision of product certification services to the standards required in the export markets rather than to the standards required in the domestic market. This means that in Bangladesh support should have been provided for product certification to Indian Standards (IS) standards rather than to BSB standards. This would have been more beneficial to Bangladesh exporters because recognition and acceptability of the IS standards among Indian consumers was likely to be higher than recognition of the BSD standards. IS standards would facilitate more rapid market penetration. In this scenario TA could also have included support for accreditation of the BSTI Product Certification Wing for IS standards by the Indian Authorities to allow mutual recognition of BSTI certification in India. This was and is usual practise in international trade as evidenced by the widespread use of the EU CE mark for electronic goods by third country exporters to the EU including India, Singapore, and Vietnam etc.

However it should also be noted that this is an optimal solution and also discussed as design weakness here the solution adopted nonetheless has strengthened core capacity in product certification and this can be extended, with further TA, to certification for international products standards.

3.3.5 Logical Framework

This original logical framework was revised in August 2010 on the recommendation of the MTE. The revision cleared up some confusion between outputs and outcomes, corrected outcomes in regard to product certification and revised a number of the assumptions. The revised logframe is used for the basis of the analysis although many of the comments apply to both logframes and there is some cross reference. A copy of the revised logframe may be seen in annex 3.

The logframe was poorly presented. It did not include activities or outputs and did not differentiate between objectively verifiable indicators (OVIs) for outputs and outcomes. The description and order of the outcomes in the project document differed from the description the order in the logframe and suggested that he project design was not well grounded in logical framework analysis (LFA) and that it was not used as a management tool for implementation.

The Development Objective was over elaborate. Ideally it should have been summarised in a single statement of the overall goal and should not have elaborated on how the goal was to be achieved. For example: 'Contribute to facilitating export oriented growth' or 'Contribute to facilitating intra SAARC trade'. Similarly the intermediate objectives should ideally have been summarised in a single statement of purpose and in manner which clearly showed it contributed to the Development objective. For example in regard to Bangladesh a single statement of purpose could have been: 'To contribute to strengthening the quality environment for producers and exporters.' This statement supports the achievement of the Development objective. It can encompass in a logical framework outcomes in relation to enabling the provision of international recognised cost effective conformity assessment services, the reduction in unsafe and non-compliant imported products been placed on the market and the development of national competency in quality management.

- ***Objectively verifiable indicators(OVIs)***

Best practice in project design requires OVIs to be 'SMART' i.e. specific, measurable, achievable, relevant, and time-bound. The OVIs set out in the logframe met the criteria in respect to specific, measurable, achievable, and relevant but most were not time bound and although measurable did not include specific targets such as, for example, the number of products or parameters covered by the accreditation or number of products certified etc. This made it harder to benchmark performance.

As noted above separate OVIs were not developed for the outputs and outcomes and OVIs which clearly relate to outputs were included for outcomes.

- ***Assumptions and risks***

Assumptions and risks are external conditions that are outside the control of the programme. The achievement of aims depends on whether or not assumptions hold true and the risks do not materialize. When working on a programme, we make assumptions about the degree of uncertainty between different levels of aims. The lower the uncertainty that certain assumptions will hold true, the stronger the programme design. Logframe demands that all hypotheses, assumptions and risks relevant to a programme are made explicit. An assumption that is almost certain is not included in the logframe. An assumption that is likely is included. An assumption that is unlikely would require a redesign of the project. For many of the assumption it is not clear if they are likely or unlikely. For example the assumption 'The product certification mark will be properly marketed by highlighting its benefits'. Given the weakness in capacity of the beneficiary institutions it is not clear that this assumption is valid. More explanation should have been included in both the project document and the logframe to substantiate how likely the assumptions are to realised.

4 PROJECT IMPLEMENTATION

4.1 Introduction

The project was launched in September 2007 as a follow to Phase I which was originally launched in mid 2003 for a 2 year period but subsequently extended to

2007. The same management structure was used as in Phase II. This consisted of a UNIDO TCB Project based in Vienna, a part-time Chief Technical Advisor (CTA) based in New Delhi who retired in 2011. Assistance was also initially provided in Nepal by a National Project Coordinator (NPC) who was full time for the first 6 months of the project and part time thereafter. The NPC was also the full time NPC of the EC-NEPAL WTO Assistance Program, which was implemented by UNIDO and ran from April 2008 to December 2011. Counterparts in each country assisted in coordinating implementation of project activities and in monitoring and reviewing the results. National Project Steering Committees (PSCs) were set up in each country comprising of stakeholders from both the public and private sectors to ensure a focus on national needs, sustainability and ownership. The PSCs were scheduled to meet at the beginning of the project and every six months thereafter.

4.2 Management

Overall the project was well managed in terms of completing the activities and achieving the targeted outputs. This ensured the effectiveness of the project despite weaknesses in planning and design noted in sections 3.2 and 3.4. Activities were implemented as planned except where events outside the control of Project management hindered project implementation such as the unstable political climate in the Maldives and Nepal. The stakeholders interviewed in each country as part of the evaluation process expressed their satisfaction with the management of the project with one exception: the ESCB regretted that further activities were not planned to develop national capability for training in quality management. But that is a design issue rather than a management issue and as already noted above is more efficiently addressed as part of a management curricula development program than as part of a quality infrastructure program.

4.2.1 Use of Inputs

Inputs included the provision of technical assistance (TA), on the job training and technical reviews and assessment by international experts, local experts, and UNIDO HQ staff. It also included the provision of office equipment, laboratory equipment and support for study tours overseas for training purposes and for participation in quality infrastructure fora. The beneficiaries noted in interviews that in relation to standardization and metrology and laboratory accreditation in all countries there was a good mix of on the job training and overseas training which allowed them to observe best practise and apply it in their own institutions. The counterparts, direct beneficiaries and the other stakeholders also expressed their satisfaction with the quality of the TA provided and the benefits provided by the outputs. The evaluator concurred except in relation to Output 1.2 ‘Plan to develop a comprehensive plan for control of substandard and hazardous imported food products’. Here the completed output did not address the requirements in the TOR in regard to ‘Legislation required for effective control’ and ‘food safety standards required for various categories of imported food products’. It also did not assess the actual existing risk from imported food stuffs import; it did not estimate the costs to the regulatory authorities of addressing these risks and it did not seek an optimal solution which took in account the resources available to the regulatory authorities. The report itself was also written in italics with various font sizes and odd formatting which did not meet international management standards for reporting.

- ***STE reports***

All of the STE reports were reviewed as part of the evaluation process. Many of the reports were based on the 'work of the expert' and appeared to have been edited by the Project management. While in most cases the quality of the content was high, the quality of the reports written by the experts themselves was variable. Some reports did not include tables of contents or page numbers and were poorly formatted and did not meet international standards in this area.

- ***South- South focus***

The use of SAARC regional international experts and accreditation bodies to provide TA in each of the countries is to be commended. The quality of the TA provided by experts from India, interviewed during the evaluation process, for the accreditation of the BAFRA food testing laboratory in Nepal, the MFDA food testing laboratory in the Maldives, and the legal metrology laboratory in Bhutan was impressive. See also chapter 3.1.2.

- ***Selection Process for ISO 22000***

The efficacy of the selection process used to select enterprises for the provision of technical and financial TA to achieve certification to ISO 22000 is questionable. It is clear that the motivation for certification was market driven and the entreprises benefited significantly from the TA which helped improve the efficiency of their operations. In relation to the fish and other food processing enterprises the implementation of ISO 22000 also directly resulted in a reduction of raw material waste in the production process which increased yields and income substantially. The intervention in this regard is sustainable and clearly has an immediate and beneficial impact on the competitiveness of the enterprise. However in all countries the companies selected were either large or well financed entreprises or both who were already exporting and could clearly afford to finance the ISO certification process from their own funds. In Bangladesh, Nepal and the Maldives entreprises were included who were already implementing HACCP and were exporting to the EU and other developed countries. In the Maldives all the entreprises were approved for export to the EU and the Maldives Fish Exporters Association (MFEA) noted that certification to ISO 22000 was not an EU requirement. In Bhutan two five star hotels were included one of which is part of an international group where cortication to ISO 22000 is group policy.

The rational for their selection was discussed with the Project manager and it appeared to have been based on the assumption that as the companies selected are industry leaders their early adoption of high quality standards will promote the adoption of the same standards by other entreprises in the same sector thereby raising the overall quality environment to facilitate exports (or in the case of the hotels an increase in tourist numbers). While this was a reasonable rational for Bangladesh and Nepal it is less so in the Maldives where the intervention appeared to have covered in excess of 90 percent of the fishing industry or in the hotel sector in Bhutan where the number of 5 star hotels is limited and it seemed unlikely that the other hotels will follow their example.

The selection criteria could have included a commitment clause requiring the selected enterprises to hold industry seminars and workshops on their experience as a condition of participation in the program. In the Maldives this commitment could have been extended to the dried and smoked fish industry which was not part of the intervention. This could have underpinned the rational and supported a wider outcome and larger potential impact.

4.4 Financial management

The Project management team provided an accounts summary which listed budgeted and actual expenditure by budget line in accordance with UNIDO accounting procedures. It appeared from a review of these accounts and discussions with the NPC in Nepal, the counterparts and stakeholders that the project was managed efficiently. 99 per cent of the allotted budget was spent in Bangladesh; 98 per cent in Bhutan, 97 per cent in the Maldives and 99 per cent in Nepal. 100 per cent of the common budget for all countries was utilised. See Table 1 -5 below.

Table 1 Bangladesh – Budget and Expenditure as of 08 March 2012*

Budget Line		Allotted Budget €	Total Expenditure €	Funds Available €	% Allotted Budget
1100	International Experts	134,233	134,207	25	100%
1700	National Experts	5,000	5,202	-202	104%
2100	Subcontracts	35,213	34,519	694	98%
3000	Study Tours Training, etc	50,000	48,950	1050	98%
4500	Equipment	133,000	133,061	-61	100%
5100	Sundries	7,000	5,877	1,123	84%
	Total	**364,446**	**361,815**	**2,631**	**99%**

*Source: Project management team, March 2012

Table 2 Buthan - Budget and Expenditure as of 08 March 2012*

Budget Line		Allotted Budget €	Total Expenditure €	Funds Available €	% Allotted Budget
1100	International Experts	125,164	124,913	251	100%
1700	National Experts	9,210	9,253	-43	100%
2100	Subcontracts	60,000	56,759	3,242	95%
3000	Study Tours Training, etc	81,970	81,935	35	100%
4500	Equipment	217,797	207,765	8,031	95%
5100	Sundries	9,043	8,987	55	99%
	Total	**503,184**	**491,612**	**11,572**	**98%**

Source: Project management team, March 2012

Table 3 the Maldives - Budget and Expenditure as of 08 March 2012*

Budget Line		Allotted Budget €	Total Expenditure €	Funds Available €	% Allotted Budget
1100	International Experts	115,086	115,255	-168	101%
1700	National Experts	10,000	10,000	0	100%
2100	Subcontracts	53,310	50,310	3,000	95%
3000	Study Tours Training, etc	52,315	51,172	1,142	98%
4500	Equipment	180,000	172,058	7,942	96%
5100	Sundries	10,000	9,999	1	100%
	Total	**420,711**	**408,793**	**11,918**	**97%**

* *Source: Project management team, March 2012

Table 4 Nepal - Budget and Expenditure as of 08 March 2012*

Budget Line		Allotted Budget €	Total Expenditure €	Funds Available €	% Allotted Budget
1100	International Experts	95,100	95,007	93	99%
1700	National Experts	15,000	14,994	6	100%
2100	Subcontracts	75,780	75,716	64	100%
3000	Study Tours Training, etc	60,566	60,310	255	99%
4500	Equipment	176,934	176,932	1	100%
5100	Sundries	10,000	9,708	292	99%
	Total	**433,380**	**432,669**	**710**	**99%**

*Source: Project management team, March 2012

Table 5 Common Budget and Expenditure as of 08 March 2012*

Budget Line		Allotted Budget €	Total Expenditure €	Funds Available €	% Allotted Budget
1100	International Experts	108,118	108,154	-36	100%
1500	Travel of project staff	8,769	8,769	0	100%
1600	Personnel Costs	61,000	60,430	570	99%
1300	Administrative support personnel	40,368	40,367	0	100%
1700	National Experts	4,632	5,209	-577	110%
5100	Sundries	15,401	12,319	3, 083	80%
Ind.	Evaluation	40,000	40,597	-597	101%
	Total	**278,288**	**275,845**	**2,443**	99%

* Source: Project management team, March 2012

For most activities, costs appear to have been broadly in line with budget and UNIDO's operational guidelines were adhered to. The CTA, the counterparts in each country and the part time NPC in Nepal were consulted in regard to local costs and

fees. Approval of activities and dispersal of budgeted funds for these activities appears to have occurred in a timely manner and did not delay implementation.

4.5 Mid-term evaluation recommendations

The Project management team has implemented or is in the process of implementing most of the general and country specific recommendations of the MTE noted in the TOR. The following was the status at the time of this evaluation of MTE recommendations which have not been implemented, or have only been partially implemented or have been implemented but the action taken was not sufficient to fully implement the recommendation.

,

a) General recommendations

i. *It is recommended that institutions such as BSTI and NBSM should demonstrate their ability to apply ISO 9000 themselves as a condition for receiving support to become management system certifiers*

This has only been partly implemented as full implementation was outside the scope of the project. The project did not support certification to ISO 9000 of BSTI and NBSM. However the project has supported the BSTI Management System Certification division to meeting the requirement of ISO/IEC 17021. It has also supported the BSTI Product Certification Wing implement a QMS to meet the requirements of ISO Guide 65.

ii. The log frame of the project should be reconsidered to facilitate future evaluation. Specifically, the OVI's, sources of verification, risks and assumptions need to be amended. The current assumptions and risks should be critically reviewed and adjusted to make them reasonable or removed. Some project outputs/outcomes should be adjusted to make them realistically attainable within the remaining project period.

A new logframe was prepared in August 2010 to implement this recommendation. However weaknesses remained in the revised logframe. See chapter 3.3.4.

iii. *Where UNIDO has supported plans to control substandard and hazardous imports it is recommended that these are adopted by the relevant authorities*.

The Project has encouraged the relevant authorities in each country to adopt the proposed plans. BAFRA in Bhutan, the MFDA in the Maldives and the DFTQC in Nepal have indicated a willingness to adopt the plans. However weaknesses in the plans need to be addressed before the plans can be implemented efficiently.

b) Country recommendations

BANGLADESH

i. *To improve ownership it is recommended that the project hold more frequent Steering Committee meetings and that some private sector involvement should be encouraged. Combining Steering Committee meetings with the*

governance activities of BQSP and its follow-up project BEST should be considered.

This could not be implemented as the stakeholders would not agree to conduct joint steering committee meetings between the 2 projects on the ground. However the evaluator disagreed with this recommendation as the relatively small size and scope of the intervention in Bangladesh does not justify holding more frequent meetings. In the period since the MTE high level of ownership in the BSTI of the Project's outputs has increased in any case. This appeared linked to the realisation of the benefits as the intervention proceeded and the efforts of the Project management team and experts towards increasing awareness in this regard.

BHUTAN

i. *In the light of the fluid macro-economic policy situation in Bhutan, the project objectives should be reconsidered once the new national economic policy is agreed.*

This was not implemented as the counterparts would not agree to it.

THE MALDIVES

i. *The Government might want to consider a two-level structure of the Steering Committee (strategic level and technical level) and include the Ministry of Health with a view to better covering MFDA and future widening of the project scope towards food safety; the Government commitment not to expand public administration is laudable but understaffing of SMTQ bodies is a major bottleneck and should be addressed.*

This was not implemented as given the small size of project and limited human resources available the stakeholders were reluctant to set-up different committees. The evaluator concurred with this view. The scope of the project would have benefited from a narrowing of the scope rather than a widening of the scope given the limited resources available. Any proposal for a food safety project should be addressed separately and implemented as a separate stand-alone project.

NEPAL

i. *Textile laboratory: NBSM should ensure preconditions for sustainable accreditation (ensure reliable electricity supply; appoint textile engineer; adopt business model similar to DFTQC that allows withholding part of the income at NBSM).*

The first part of this was implemented. However the second part cannot be implemented. DFTQC does not have the right to withhold part of its income. This would require government approval which in the opinion of both DFTQC and NBSM is unlikely to be forth coming.

4.6 Monitoring and Evaluation

The project document envisaged that project monitoring and evaluation (M&E) would be carried by:

a) National Project Steering Committees (PSC) comprised of stakeholders from the public and private sector who were obliged to meet biannually to review progress in implementation;
b) Annual Project reviews by the Governments, UNIDO and the Counterparts in each country;
c) Reporting: Biannual progress reports and final report and
d) Independent evaluations

a) National Project Steering Committees (PSC)

The PSCs did not meet as planned. In Bangladesh only 3 meetings were held to date with a gap of almost 13 months between the first in November 2008 and the second in December 2009 and a gap of almost 20 months to the 3rd meeting in August 2011. In Bhutan 4 meetings were held with a gap of about 6 month between the first and second; 11 months between the second and third and 16 months between the third and fourth in 2011. In the Maldives 4 meetings were held with a gap of about 3 months between the first and second; 17 months between the second and third and 20 months between the third and fourth in 2011. In Nepal 4 meetings were held with a gap of about 11 months between the first and second; 15 months between the second and third; 9 months between the third and fourth 2010 and none in the 23 months since then.

In a project of this size an annual meeting of the PSC combined with *ad hoc* meeting to address project critical decisions and review of brief quarterly reports should be enough to ensure adequate M&E. However the frequency of PSCs meetings in all countries did not meet this minimum criterion.

b) Annual Project Reviews
These were carried out as planned.

c) Reporting
Progress reports were submitted to NORAD during the UNIDO-NORAD Semi-annual meetings as required by the Project document. The progress report provided an ongoing update of project activities and noted completion of outputs where relevant.

UNIDO will prepare a Final project report for consideration by NORAD.

d) Independent evaluation
NORAD initiated a MTE in April 2009. As noted above most of the key recommendations were implemented or were in the process of implementation. A copy of the key MTR recommendations may be seen in the TOR for this evaluation in annex 4.

This Final evaluation is carried out as part of the M&E process.

4.6.1 Conclusion

The M & E system was sufficient despite the infrequent meetings of the PSCs primarily because of the limited number of activities in each country which makes it easier to manage at national level.

However the progress report could be strengthened as a management and M&E tool by requiring brief 2-3 page quarterly summaries of progress towards achieving targeted outputs, outcomes and the development objective in accordance with LFA.

The use of a stream lined web enabled results M&E system would strengthen the M&E system and ownership by providing more efficient and provide faster feed back to the Project management, the PSCs, the project counterparts and other key beneficiaries and stakeholders.

5. ASSESSMENT

5.1 Relevance

5.1.1 Consistency with National Policies

BANGLADESH

The intervention was in line with the Government of Bangladesh (GoB) development policy set out in its Poverty Reduction Strategy Paper (PRSP) published in November 2005.[8]. Export diversification both in terms of an expanded range of products and increased value added across all product sectors was a key objective of this strategy. It identified five priority sectors which include sectors supported in this intervention i.e.

- Agro-products and agro-processed goods including fishery products and
- High-value ready-made garments (RMG).

BHUTAN

The intervention was in line with Bhutan's development policy as set out in the 10th Five Year Plan (2008-2013). As noted above The priorities for the Tenth Plan included the strengthening of food safety standards, quality assurance, inspection and certification, as well as developing laboratory services in the food processing sector with specific targets set for the use of commodity standards and use of HACCP.

THE MALDIVES

The intervention was in line with the GoM's development strategy. This is set out in 'Vision 2020' and the GoM's Seventh National Development Plan (2006-2010). Vision 2020 envisaged the promotion of sustainable and equitable economic and

[8]Unlocking the Potential: National Strategy for Accelerated Poverty Reduction', Dhaka, Bangladesh, November 2005.

social development through economic diversification with export-oriented trade in products and services. It also included the promotion of corporate social responsibility. A key objective of the Seventh National Development Plan was to enhance trade, support businesses and build competitive industries. Part of the strategy included the introduction of standards to improve quality management in order to increase the level of confidence of buyers of Maldivian products and help promote exports.

NEPAL

The intervention was in line with the Government of Nepal's (GoN) approach to development, as set out in the Three-Year Interim Plan (2008-2010). Trade facilitation and economic capacity building were key objectives of this plan and key policies included: '

- Private sector will be developed by emphasizing competition culture promotion, entrepreneurship development and productivity enhancement and other subjects;
- International trade will be expanded by opening North-South trade route;
- Institutional reforms, human resource development, and capacity building in trade will be encouraged;
- Exportable products with comparative and competitive advantage will be identified and developed. Also there will be diversified market to promote exports; and
- Trade facilitation procedures (like payment system, customs procedures, transport procedure and quality control) will be made compatible with the trading partners (China, India, etc.)'.

5.1.2 Consistency with UNIDO and NORAD Policy

The objectives, activities, outputs and outcomes of this project were consistent with UNIDO policy of building trade capacity in developing countries through strengthening the national quality infrastructure to provide internationally recognized conformity assessment services to regulatory authorities, producers and exporters to facilitate sustainable export orientated growth at a regional level and within the global multi-lateral trading system. This policy included provision of TA to NSBs, laboratories for product testing and calibration of measurement equipment, inspection, market surveillance services, accreditation and certification bodies, traceability schemes and quality promotions.

The project design and implementation was also consistent with the TCB division's strategy of helping countries to help themselves, opening doors to food producers and exporters to new opportunities, enabling producers and exporters to prepare themselves for entry into world markets and of helping them find own solutions to the challenges they face. This strategy drew on trade capacity building experience on the development of competitive export supply in low-income sectors with high employment impact such as fisheries and horticulture as well as further development of essential compliance infrastructure and services, such as for SPS management, inspection, product testing for key export sectors and accreditation.

It was also consistent with UNIDO's mandate to support industrial development of the lLDCs which it has being implementing over the last 40 years. Bangladesh, Bhutan, The Maldives and Nepal are all classified as LDCs. It was also consistent with UNIDO policy of supporting regional cooperation and integration to facilitate trade. It complemented the services and expertise offered by other development partners such as WTO, the WHO and the EU.

The Project objectives and development goal were also in line with the Kingdom of Norway's overall development cooperation objectives which included support to developing countries to achieve sustainable economic development and create an enabling business environment for the purpose. It was also in accordance with NORAD's policy of channelling funding through multilateral organizations with project management experience like UNIDO to achieve these objectives. NORAD and UNIDO have a long history of cooperation in this area.

- ***Key beneficiaries, stakeholder & target groups***

At nation level the stakeholders and target groups are the institutions responsible for various components of the national quality infrastructure. This includes the NSBs who also have responsibility for the key ministries with food testing laboratories.

In direct beneficiaries include the Industry Chambers of Commerce in Bangladesh, Bhutan and Nepal and the MFEA in the Maldives who were consulted in the section of enterprises to support for certification to ISO 22000 and in the organisation of the various workshops on SA 8000, OSHAS 21000 and WRAP. Direct beneficiaries included the selected entreprises as the participants in the workshops. Despite reservations on the selection of the enterprises for certification to ISO 22000 concluded that the decision to include them as direct beneficiaries was likely to encourage other smaller enterprises to follow suit. If this occurs the impact is likely to be an overall improvement in the national quality environment in the export food sector which is also likely improves the business climate for inward investment. See also chapter 4.2.1.

5.1.3 Coherence with other donor on-going initiatives in this area

REGIONAL

The EU-SAARC Programme of Economic Cooperation (ESPEC) EC was launched in 2007. The objective was to stimulate economic growth and development in South Asia and its purpose was to facilitate closer economic cooperation among the member countries of SAARC. UNIDO agreed to implement the SAARC's Harmonization of Standards and Conformity Assessment System component. The EU provided EUROS 1 Million and UNIDO contribution EUROS 100,000 for this purpose. It was expected that the TA provided under this would complement rather than overlap the Project's activities. However as noted above the SAARC Secretariat found it difficult to transfer resources to UNIDO and as a result the project never took the ground off.

SAARC signed Memorandums of Understanding (MoU) with the Physikalisch-Technische Bundesanstalt - German Metrology Institute (PTB) to provide TA to SAARC in 2003. This was activated in 2010 with an agreement to provide a training and capacity building program for the development of a SAARC regional quality infrastructure based on regional collaboration and division of labour in metrology and accreditation. To that aim, it was agreed that support to capacity development will be provided particularly for institutions in the SAARC LDC countries. The Implementing agencies were to be the NMIs, ABs and other quality infrastructure institutions in SAARC including SARSO and the SAARC Chamber of Commerce and Industry (SCCI). The program was launched at the beginning of 2012 and should complement the activities of the Project under Phase 3.

LDCs

BANGLADESH

The Project was coordinated with BQSP and the BEST programmes which were also managed by UNIDO. There was some overlap with the Project in the area of support to BSTI PSC and MSCS as well as in relation to the promotion of social standards. However the Project management managed it efficiently to ensure the support provided was complementary.

BQSP

The BQSP was a launched in January 2006 and continued to December 2010. It was funded by the EU with €7.8 Million, NORAD with €800,000 and GoB contribution €1.4 Million.

The objective of the BQSP is to contribute to growth and poverty reduction by assisting Bangladesh in the development, strengthening, and diversification of its production and export base. The specific objectives of the UNIDO component of BQSP are to:

- Bring quality standards and quality management in Bangladesh up to an international standard and
- Increase awareness of international quality standards in the business community to support the development and diversification of exports.

Sub-components included:

- Strengthening the legal framework for standards, metrology, testing and conformity assessment to international standards;
- Strengthening BSTI to become an effective standards body;
- Strengthening the consumer association;
- Promoting awareness on quality and environmental management systems and social standards and
- Setting-up a national accreditation body.

Better Work and Standards Programme (BEST)

BEST is a follow up programme to the BQSP. It was a launched in February 2010 and runs until December 2014. It was funded by the EU with €12.3 Million, NORAD with €1.2 Million and GoB contribution €9.4 Million. It is implemented by UNIDO and GIZ.

The Objective of the BEST program is contribute to economic growth and poverty reduction by supporting Bangladesh to take advantage of global market opportunities. The Programme purpose is to improve competitiveness and facilitate export growth and di-versification, through increased productivity, and compliance with international standards.

BEST includes a 'Better Quality Infrastructure' component whose objective is to strengthen the national quality conformity assessment infrastructure and integrate it with the international system in order to increase consumer protection, and improve international competitiveness. This is managed by UNIDO. Its expected results include:

- Bangladesh Accreditation Board is a full member of the APLAC, IAF and a signatory of APLAC and IAF Mutual Recognition Arrangements;
- The institutional structure of BSTI is reformed and its operational capacity strengthened in line with international norms;
- The overall quality management structure of MOI is reformed and a regulatory body established to enforce compliance with mandatory standards;
- Environmental control systems of Bangladesh Council of Scientific and Industrial Research (BCSIR) chemical instrumentation and calibration laboratory are improved and accredited and
- The consumer market surveillance system is improve

BEST also includes a 'Better Work in Textiles and Garments' with the objective to improve competitiveness of the textiles and readymade garment (RMG) sector and improve working conditions, leading to expansion and creation of better employment opportunities. This component is managed by Deutsche Gesellschaft für Internationale Zusammenarbeit - the Federal German Development Agency (GIZ).

A third component Better Fisheries Quality is also managed by UNIDO. Its objective is to strengthen the national quality infrastructure for fish and fish products to meet safety and quality requirements in export markets, improve competitiveness, and exploit international market opportunities especially in the EU.

BHUTAN

There was very limited donor support to the national quality infrastructure in Bhutan. The Food and Agricultural Organisation (FAO) supplied some laboratory testing equipment to BAFRA. This was complementary to the Project's intervention.

THE MALDIVES

There was very limited donor support to the national quality infrastructure in Bhutan. The World Health Organisation (WHO) supplied some laboratory testing equipment to the MFDA. This was complementary to the Project's intervention.

NEPAL

The Project was coordinated with the Component 1: the SPS/TBT component implemented by UNIDO of the EC-Nepal WTO Assistance Programme. There was some overlap with the Project in the area of support for the NBSM PSC, the NBSM MSCS, the NBSM textile laboratory and the DFTQC. However the Project management managed it efficiently to ensure the support provided was complementary.

The EC-Nepal WTO Assistance Programme was launched in March 2007 and continued to December 2011. It had a budget of funded by the EU: €2.2 million.

Its primary objective was to increase economic development and reduce poverty through Nepal's integration into the international system. The specific objectives of the Programme under Component 1 were to:

- Create an enabling and WTO-compliant environment for SPS and TBT compliance. In particular to address quality infrastructure issues to facilitate product acceptance at international level and to improve the capacity of Nepal to export products of improved quality.

The envisaged results were under Component 1 were:

- Capacity of Nepal's export industry to comply with standards and certificate requirements strengthened by improving Nepal's standards infrastructure. This involves strengthening of (I) accreditation and conformity assessment infrastructure and of (ii) metrology and testing laboratory services.
- The TBT and SPS enquiry points for standards dissemination established resulting in effective country participation in the WTO TBT and SPS regimes.

The World Bank (WB) and the Japan International Cooperation Agency (JICA) provided TA to DFTQC for laboratory refurbishment prior to the launch of Phase II of the Project. This facilitated the Project's intervention in this area. The UNDP integrated framework programme also provided TA to NBSM's food laboratory which was not assisted under Phase II. PTB also provided some training on NBSM in the field of metrology which did not overlap with the Project's activities.

5.2 Ownership

There was a high sense of ownership of the outcome where the intermediary and direct beneficiary were part of the same institution and directly involved in managing the output. This was case in Bhutan in regard to the BSB on standards development and strengthening the legal and industrial metrology laboratory; in Bangladesh and Nepal on strengthening the PCS, MSCS certification and the textile laboratories. The same applied to BAFRA in Bhutan, the MFDA in the Maldives, and DFTQC in Nepal.

The Project management's good working relationship with the counterparts also contributed to a high sense of ownership.

An exception was noted in relation to Output 1.2 'Plan developed to control substandard and hazardous imported products' in Bangladesh where there was no sense of ownership in BSTI of the outcome. This may be because the NFSAC had decision making responsibility in this area and it was not clear that BSTI would be responsible for implementation and thus a direct beneficiary of future TA in this area.

Another exception was noted the Maldives where the MED was the intermediary and MSMC was the direct beneficiaries. The sense of ownership in the MED of the outputs to strengthen the MSMC was low. However this may be due to the fact that the MSMC's standardization unit and metrology laboratory was not operational due to shortage of staff; responsibility for the metrology laboratory was being transferred to the Maldives Polytechnic and responsibility for legal metrology inspection was being transferred to the Atoll Councils. The reason for transferring the metrology laboratory was being transferred to the Maldives Polytechnic was because of a shortage of staff at the MSMC. This action should improve sustainability in the long terms. The transfer of legal metrology inspection to the Atoll Councils appears to be for political reasons. It is not clear what the consequences will be.

There was less ownership of the outputs and outcomes where the direct beneficiary was not in the same organisation as the intermediary as was the case in regard to support provided to the Department of Trade (DoT) in the Ministry of Economic Affairs (MoEA) in Bhutan for legal metrology inspection. Neither the BSB nor the DoT had a sense of ownership of the outcome although this may be due to partly due to a resolved dispute between the BSB and the DoT as to who has responsibility for legal metrology inspection. The BSB were of the view that the DoT should solely have this regulatory responsibility.

There was a high degree of ownership among all the entreprises supported for certification to ISO 22000. He also noted a similar sense of ownership in ESCB in relation to the support given in developing the training program.

5.3 Efficiency

5.3.1 Management

Overall management of the project has been reasonably efficient. The targeted outputs in Bangladesh have been 100 per cent achieved. In Bhutan the achievement is about 90 per cent as BAFRA's food testing laboratory is not yet accredited. In the Maldives only about 70 per cent has been achieved as a result of events outside the control of the project e.g. staff shortage, political decisions which delayed implementation etc. Similarly in Nepal about 70 per cent has been achieved as the DFTQC food testing laboratory, the NBSM Product certification system and NBSM MCS have not yet reached the requirements for accreditation. The unstable political situation in Nepal contributed to this delay and this was outside the control of the Project management team.

5.3.2 Financial Management: Costs versus benefits

Inputs included the provision of technical training and technical reviews and assessment by international experts, local experts, and UNIDO HQ staff. It also included the provision of laboratory equipment and support for travel to meetings, as well as meetings of SARSO. The procurement of and laboratory equipment was carried out by UNIDO HQ in accordance with UNIDO procurement guidelines.

The intermediary and direct beneficiaries and the other stakeholders interviewed expressed their satisfaction with the quality of the TA provided. Overall, within the constraints of the project design adopted at the outset overall costs of the project have been justified by the benefits delivered.

However as noted in Chapter 3.3 it is arguable that better use of LFA could have resulted in a more effective design with more efficient use of resources which could have increased benefits to the stakeholders and strengthened sustainability and impact.

5.4 Effectiveness and Impact

This chapter is divided into 2 sections. Chapter 5.4.1 assesses the effectiveness in terms of outputs completed and benefits received by the counterparts and stakeholders. Chapter 5.4.2 assesses the achievement of the outcomes and their potential impact. As no impact has occurred at this stage this chapter hypothesized possible ways in which the impact may occur. As noted in Chapter 3 there was not sufficient information and data in the project documents for a quantitative estimate of the impact at the start of the project. See recommendation 1.

5.4.1 Effectiveness: Outputs, Benefits

The achievement of outputs and delivery of planned benefits was assessed in terms of the project design in the Project documents for Phase II and the revised logframe as of August 2010. The findings are set out below for each country.

BANGLADESH

Output 1.1 *Product certification system of BSTI complies with ISO Guide 65 and is internationally accredited*

The targeted output was achieved. The project fielded international experts to provide *on the job* training to BSTI staff initially to implement a QMS to meet the requirements of Guide 65 and subsequently to initiate a pilot program for the accreditation of 5 product categories for which mandatory certification is not required. These were: chutney, edible gel, fruit drinks, protein rich biscuits and wafer biscuits. The Indian National Accreditation Board for Certification Bodies (NABCB) granted accreditation for the BSTI PCS for these products in January 2012. As the NABCB is a member of the International Accreditation Forum (IAF) and a signatory to the IAF Multilateral Recognition Arrangement (MLA), the product certification issued by BSTI for these five product categories should be accepted internationally as meeting BDS standards.

This contributed to the achievement of the immediate objective and it strengthened the overall national quality environment but the benefits to exporters and the contribution to the Development objective in terms of facilitating intra SADC trade were limited as exporters are more likely to benefit from PSC for international product standards rather than for BDS. However it established an international recognised platform which will facilitate expansion of the BSTI PCS to include certification to international or trading partners' product standards with the potential of reducing market entry risk and costs for exporters.

Output 1.2 *Plan developed to control substandard and hazardous imported products.*

This output was completed. A study of existing controls was carried out and an outline plan was developed. The quality and utility of the completed output is questionable. The plan was not benchmarked against best practise for food import controls systems elsewhere in countries of similar size in either developed or developing countries. It did not identify specific existing risks in terms of commodities, products, product type or categories or products' country of origin. It did not discuss or differentiate between phytosanitary, sanitary (hygiene), and veterinary or food safety risk or address the different inspection procedures, resources and quality infrastructure necessary to manage the risk. It also did not estimate the operational costs to the beneficiary after implementation. It did not seek to determine an optimal cost effective solution relative to the identified risks and the resources available to the regulatory authorities to manage the system after implementation. As noted in chapter 4.2.1 it also did not address the legislative changes necessary to SPS measures and or food safety standards to ensure regulatory requirements were in place for imported products as required in the TOR for the assignment.

BSTI forwarded the plan to the National Food Safety Advisory Council (NFSAC) where it remains. There was no evident ownership of the plan in BSTI. See also Chapter 4.

Output 1.3 *Textile laboratory of BSTI strengthened and accredited based on ISO/IEC-17025 and a suitable marketing strategy developed.*

This output was completed and significant benefits were delivered as planned. The project supported the refurbishment of the laboratory, the procurement of equipment, training materials and consumables and the implementation of a QMS system required for accreditation to ISO 17025. It also provided technical training for staff on equipment and relevant testing methodologies. The laboratory was accredited in March 2011 by the Indian National Accreditation Board for Laboratories (NABL) accredited to ISO 17025 for 24 textile test parameters (11 Chemical and 13 mechanical). The project also supported the development and implementation of a marketing plan to promote the laboratory testing services.

The Project was continuing to provide support for an additional 16 parameters which the laboratory expects to be accredited for later this year. This included training of 3 technical staff at the Bombay Textile Research Association laboratory in India which is also accredited by the NABL.

Output 1.4 *Between 15 to 20 auditors trained for ISO 22000 Food Safety Management System and two food processing companies certified; awareness created among 100 industry personnel about WRAP standard and OHSAS 18000.*

This output was completed and delivered the benefits as planned with the exception of activities on OHSAS 18000. 19 persons including personnel from BSTI and private sector food business entreprises were trained as Auditors and or Lead Auditors for ISO 22000. 10 persons passed exams to quality as auditors. 40 persons participated in an awareness seminar on ISO 22000 and awareness seminars on WRAP were held in Dhaka and Chittagong with 60 and 75 participants respectively. The project also provided support for 2 private sector enterprises for certification to ISO 22000. The enterprises were supported by the Federation of Indian Chambers of Commerce and Industry (FICCI) Quality Forum and were Agricultural Marketing Co Ltd in Ghorashal for Mango and Juice in Tetra Pack and Meenhar Fisheries Ltd. in Cox's Bazar for fish Products. Both enterprises were certified by TÜV India in March 2011.

Two awareness seminars on OHSAS 18001 were dropped at the request of the counterpart.

Output 1.5 *Management System Certification Body of Bangladesh accredited.*

This output was achieved and benefits delivered as planned. The project fielded experts to support the BSTI develop and implement a MSCS to international standards required to meet the requirements of ISO/IEC 17021.2006 'Conformity assessment -- Requirements for bodies providing audit and certification of management systems standard' and to related International IAF guidelines. Study visits were arranged for 2 BSTI staff to SIRIM in Malaysia. Classroom and on the job training was provided to create a pool of lead auditors, auditors and technical experts for certification to ISO 9001, ISO 14001, and ISO 22000 standards. The project also provided assistance to develop the BSTI (Management System Certification) Regulation 2009. This provided for a broad based governance structure for the operation of the MSCS in accordance with the requirements of ISO/IEC 17021. The BSTI MSCS was accredited by Norwegian Accreditation for ISO 9001, ISO 14001, and ISO 22000 standards In June 2009. This was reaffirmed in December 2011 following a surveillance visit.

The project has continued to assist BSTI with auditor training to ensure sustainability of the intervention. A training program was provided by Det Norske Veritas (DNV) India in April 2012.

Output 1.6 *About 50 managers from industry trained in quality improvement tools and techniques.*

This was completed as planned. A four day training program on modern quality improvement Tools and their application was delivered in April 2010 at the ESCB. A total 40 persons attended from various industries including Cement, Paper, Chemicals, Power, Ice Crème, Steel, Salt, Cables etc and faculty members of the ESCB.

BHUTAN

Output 2.1 *Capability created in the standards cell for adoption of standards, and WTO TBT Inquiry Point/Standards Information Centre strengthened.*

A series of activities were completed to achieve this output with considerable benefits delivered to the targeted stake holders. The project provided training to the SQCA (now the BSB) on the establishment and operations of a WTO TBT Enquiry point Study tours were arranged to the Thai Industrial Standards Institute (TISI) in Thailand and the Standards, Productivity and Innovations Board (SPRING) in Singapore. Training was also provided to the standards cell on the adoption of international standards and the standards of trading partners. A three-week comprehensive management training course was also arranged for 2 SQCA staff at the Technical Information Centre at Paibare Inc. in Philippines. Assistance was provided for two publications i.e. 'Guide for Standardization' and 'Implementation of the WTO Agreement on TBT'. Support was provided to set up a Technical Information Centre for the dissemination system of standards and technical regulations to industry and exporters.

The project also provided policy support. Assistance was provided to draft the Bhutan Standards Act 2010 and to draft the Weights and Measures Act. This was under consideration by the Bhutanese parliament at the time of this evaluation.

Output 2.2 *Plan developed to control substandard and hazardous imported products.*

A study of existing controls and a tentative plan to improve the current system was prepared. However weaknesses similar to those noted for the same output in Bangladesh were noted particularly in relation to where the proposal represents a cost effective and sustainable solution. The rational for including a proposal in the plan to set up a system of approval of the use of the BSTI certification mark by Bhutanese exporters to Bangladesh was not apparent. See section on Bangladesh above.

However there was a high sense of ownership in BAFRA of the proposed plan which may ensure that its weaknesses plan will be addressed when it is operationalized for implementation. See also chapter 6.4.1 and recommendations.

Output 2.3 *Legal and industrial metrology laboratory established*.

The project has provided equipment and training to establish a legal and industrial metrology laboratory. Secondary standards for length and mass were supplied in addition to working standards for volume, equipment for calibrating some temperature and pressure instruments and air conditioning equipment for environmental control. Training for legal metrology inspectors was arranged for 6 persons from the Ministry of Trade and the BSB at the Indian Institute of Legal Metrology, (IILM) at Ranchi in India. Two BSB staff were also sent to the Korean Institute of Standards and Science (KRISS) for training in industrial metrology. 2 staff were supported to participate in a regional workshop on conformity assessment held in Dhaka, Bangladesh. A study tour was also organised to the legal metrology

institutes in the Philippines Singapore and Thailand for 4 BSB staff. The project also supported the laboratory with in house and overseas technical training for staff to strengthen its QMS and competency in calibration to meet the requirements for accreditation to ISO 17025 for mass and length. It is expected that the laboratory will achieve accreditation in these dimensions within the next 12 -15 months.

The Metrology Laboratory was officially established within the BSB under the Bhutan Standards Act 2010.

Output 2.4 *Food testing laboratory of BAFRA strengthened and accredited.*
The project provided equipment and training to develop the chemical testing capacity of the NQCL under BAFRA. This includes equipment for testing for pesticide residues, contaminants and heavy metals. It also included ancillary equipment and consumables. The project provided in-house and overseas training for technical staff in implementing a QMS to meet the requirements for accreditation to ISO 17025 and the relevant testing methodologies enabled by the equipment supplied. Training was arranged for a number of BAFRA staff at Vimta Labs Ltd in Hyderabad in India and subsequently at the UNIDO-VIMTA South-South Training Facility for Testing Laboratories which was established by UNIDO Centre for South-South Industrial Cooperation (UCSSIC) and Vimta Labs Ltd in 2010 and 2011. A visit was also arranged to NABL for training in calibration and to Dali in Yunnan, China for detection of melamine contents in dairy products. The laboratory applied to NABL for pre assessment for accreditation to ISO 17025 for a number of testing parameters and this will take place shortly. It was expected that it will achieve accreditation within the next 12 months.

Output 2.5 *Fifteen auditors trained on ISO 22000 and enhanced HACCP and ISO 22000 auditing capacity through certification of two food processing units for each of the above standards.*
The project organised a 5 day auditor/lead auditor training on ISO 22000. 20 people participated of which 14 passed the exams which is a 70 % success rate. A 2 day awareness seminar was also arranged with BAFRA for 53 participants who included 29 Food Inspectors of BAFRA, officials from other agencies and the private sector. BAFRA expressed with the quality of expertise and level of assistance provided.

The project provided support in partnership with the Federation of Indian Chambers of Commerce and Industry (FICCI) to 4 companies for development and implementation of a QMS to the standard required for certification to ISO 22000. The companies consisted of 2 five star hotels. 1 state owned food processing and a state owned brewery. All were accredited by TÜV India in March 2011. Another state owned food processing company was assisted in implementing HACCP. All 3 companies expressed satisfaction, when interviewed, with the assistance provided. All noted an improvement in reduced food safety risk and the companies implementing ISO 22000 noted an increase in productivity. This resulted primarily from changes in their operating procedures which increased employee accountability and reduced waste (increased raw material yield) and down time.

Output 2.6 *Awareness created about SA 8000 and OHSAS 18000 standards.*
This output was achieved. One workshop was held in Thimphu and one in Phuentsholing on SA 8000 and OHSAS 18000 standards in December 2008. About 30-40 people participated in each workshop.

Output 2.7 *About 20-30 managers from industry trained in quality improvement tools and techniques*
This output was dropped on the recommendation of the MTE.

THE MALDIVES

Output 3.1 *Capability built in the standards cell for adoption of standards and WTO TBT Inquiry Point/Standards Information Centre strengthened.*
The project provided on the job training. 2 workshops were held in 2008; one establishing an effective WTO TBT Enquiry Point and one on the formulation of standards and adoption of existing international standards. The first was attended by officials from MED, MSMC and the Maldives National Chamber of Commerce and Industries (MNCCI) and the second was attended by MSMC officials. Policy advice was also provided and an action plan was developed for the MED and MSMC in consultation with stakeholders. However this plan has yet to be implemented due to staff shortages.

The MED expressed satisfaction with the quality of TA provided but there is clearly a shortage of human resources in the MED and MSMC which limited absorption capacity and is ongoing constraint on strengthening capacity in this area.

Output 3.2 *Plan developed to control substandard and hazardous imported products.*
A study of existing controls and a tentative plan to improve the current system was prepared. However similar weaknesses exist in the completed output to those noted in Bangladesh particularly in relation to whether the proposal represents a cost effective and sustainable solution. See section on Bangladesh above.

There was a high sense of ownership in MFDA of the proposed plan which may ensure that the weaknesses of the plan are addressed when it is operationalized for implementation. See also chapter Recommendations.

Output 3.3 *Legal and industrial metrology laboratory established*
It does not appear that this output will be achieved in the near future due to staff shortages and institutional changes in the MED and MSMC which has affected the operation of the existing working standard laboratory set up by the UNIDO under Phase 1 of the project.

The project has provided training to the laboratory staff and to legal metrology or weights and measures inspection staff in the MSDC on calibrating measuring instruments for mass, length, volume, including calibration of weighbridges, fuel tankers and fuel dispensing Pumps in Male and in the atolls. At the same time the project assisted the MSMC upgrade the legal metrology centre at Addoo in the South

Province. 2 MED officials were also assisted to attend the Asia Pacific Legal Metrology Forum (NHSL) and the Asia Pacific Metrology Programme (APMP), International Symposium on Metrology for Economic and Social Sustainability in Beijing, China in December 2011.

But in March 2012 the MED and the MSMC decided, due to staff shortages to transfer responsibility for the working standards legal and industrial metrology laboratory to the Maldives Polytechnic as the MSMC does not have sufficient staff to operate it. The working standards will be transferred to the Maldives Polytechnic engineering laboratory where staff are available and a working standards laboratory established. While this will delay plans for the accreditation of the laboratory to ISO 17025 for mass and length dimensions it should strengthen sustainability. The project was continuing to provide training on legal metrology and has arranged for 10 legal metrology staff from Maldives Polytechnic and from the Atolls' metrology cells to receive training at the ILMI at Ranchi in India in April 2012. See also Output 3.8 below. See also Section 5.2.

Output 3.4 *National food testing laboratory of MFDA strengthened and accredited.*

The output was achieved and benefits delivered as planned. The project provided equipment and training to develop the chemical testing capacity of the NSL in the MFDA under the Ministry of Health and Family (MoHF). This included equipment for testing for histamine, contaminants, heavy metals and some common laboratory facility such as the fumehood had been provided for testing pesticide residues . It also included ancillary equipment and consumables. The project provided in-house training to strengthen technical capacity in the microbiological and chemical laboratories to meet requirements for accreditation to ISO 17025. The MFDA expressed satisfaction with the expertise provided.

The MDFA microbiology laboratory achieved accreditation in 2008 for a number of testing parameters in water and food from the Bureau of Laboratory Quality Standards (BLQS).The BLQS accredited the chemical laboratory towards the end of 2010 for a numbers of tests in water and food and in particular in fish products.

Output 3.5 *Awareness created among personnel involved in fish harvesting about Good Hygiene Practices (GHP), and quality of fish products improved in the supply chain, and a report produced on the new business model, taking into account the varying fish harvesting seasons.*

This was only partly completed. The project fielded a fishery expert who provided train-the-trainer Course on training for fisherman on the hygienic handling of fish to meet international Market Requirements at MED's MSMC Training Facility in Male' in 2009. There were 29 participants of whom 14 were from the Fisheries Extension and Training Unit in Ministry of Fisheries and Agriculture (MoFA), 5 from MoFA, 7 from MFDA (7) and a 1 from MED. A 1 day seminar was also provided for officials from the MED, MoFA and MFDA and 20 people participated.

The fishery expert also carried out an assessment of the Maldives food control system for the export of fish products with particular attention to meeting EU

requirements and made recommendations some of which have been implemented. This included an assessment of the air cargo handling area of Malé International Airport to meet EU HACCP requirements in handling fish and fish products.

The report on the new business model taking into account the varying fish harvesting seasons was not completed as there was no stakeholder consensus on the objective of the output or on any potential benefits. The stakeholders noted that they did not need a new business model.

Output 3.6 *Fifteen auditors trained on ISO 22000 and capacity built for certification and two fish processing units certified.*

The project organised a 5 day auditor and lead auditor training on ISO 22000. 18 people participated of which 15 passed the exams which is an 83 % success rate. A 2 day awareness seminar was also arranged with MFDA for 54 participants. The MFDA expressed with the quality of expertise and level of assistance provided.

The project provided support, in partnership with the FICCI to 8 fish processing enterprises for the development and implementation of QMSs to the standard required for certification to ISO 22000. The project also provided support to the air cargo handling department at Male International Airport for implementation of HACCP. All 8 companies were certified to ISO 22000 by SGS in 2011. 3 companies were interviewed and all expressed satisfaction with the assistance provided. All noted an improvement in reducing food safety risk and the companies implementing ISO 22000 noted an increase in productivity. This resulted from changes in their operating procedures which increased employee accountability, reduced waste, and reduced down time.

Output 3.7 *Awareness created about OHSAS 18001 standards.*

The project organised 3 OHSAS 18001 Awareness Seminars in July 2009. About 80 persons participated over the 3 seminars. The MSMC used the information from these seminars to conduct awareness programs in Addu and Fuamulak, Gaafu Alifu and Gaafu Dhaalu which supported sustainability.

Output 3.8 *Seven metrology cells established and metrology services decentralized and available to general population*

In 2010 the project supplied legal metrology inspection equipment to the MSMC for 7 legal metrology cells which are to be established in the atolls. These were planned as regional MSMC offices. However the Maldives government has recently placed the responsibility for regional legal metrology inspection or weights and measures inspection under the control of the Atoll Councils who fall under the Ministry of Home Affairs. This has delayed the setting up and operation of the regional legal metrology inspection system.

NEPAL

Output 4.1 *Product certification system of NBSM complies with the ISO Guide 65 and is accredited internationally.*

This output was designed to upgrade the product certification system of NBSM to international standards in order to facilitate international recognition of its Product

Certification Scheme to Nepalese Standards (NS) and NS Product Certification Mark. Starting in March 2010 the project fielded international experts to provide on the job training to NBSM to implement a QMS to meet the requirements of Guide 65. The project also organised training for 2 NBSM at Vimta Ltd laboratory in Hyderabad India and at SIRIM in Malaysia on product testing for certification and on product certification procedures in 2010. The project also procured, installed product certification software to NBSM requirements and provided training in its use

In June 2011 the Quality Council India (QCI) completed an evaluation of the preparedness of the NBSM Product Certification Scheme for accreditation and made recommendations for corrective action. The NBSM is currently addressing these recommendations and is expected to meet the accreditation requirements later this year or in early 2013.

Discussions with the NBSM Product Certification Department indicated that this intervention acted as a catalyst to increased staff motivation, commitment and efficiency and which will support its sustainability.

Output 4.2 *Plan for quality control of imported goods developed.*
A study of existing controls and a tentative plan to improve the current system was prepared. Although the quality of the study of existing controls in more comprehensive that that carried out in Bangladesh the perceived risk posed by imports was not quantified. Similar weaknesses in the proposed plan to improve the current system were also noted in Bangladesh particularly in relation to whether the proposal represents a cost effective and sustainable solution. See also chapter 6 Recommendations.

There was high sense of ownership in DFTQC of the proposed plan and this may ensure that the weaknesses of the plan are addressed when it is operationalized for implementation. See also chapter 6 Recommendations.

Output 4.3 *Textile laboratory of NBSM strengthened and accredited*.
This output was partly completed. The project supported the refurbishment of the air conditioning system for environmental controls. It also supplied equipment (Optical Fibre Diameter Analyser) for testing pashmina and supported its installation and training in its use. Workshops were organised on pashmina certification. Training was provided for the laboratory management and technical staff to meet the requirements for accreditation of ISO 17025 on testing parameters relating to pashmina. The support is ongoing and the laboratory management expected to achieve accreditation this year subject to the support continuing.

Output 4.4 *Food laboratory of the Department of Food Technology and Quality Control (DFTQC) strengthened and accredited.*
The project provided equipment and training to develop the chemical testing capacity of the Central Food Laboratory (CFL) of the DFTQC in the MoAC. This included equipment for testing for pesticide residues, contaminants and heavy metals. It also included ancillary equipment and consumables. The project provided in-house

training to implement a QMS and strengthen technical capacity to meet requirements for accreditation to ISO 17025.

Four study visits were also arranged for DFTQC staff for training on managerial and technical requirements for accreditation to ISO 17025, at VIMTA Labs Ltd, in Hyderabad, India in 2009 and at Shimadzu (Asia Pacific), Singapore between 2009 and 2011. Assistance was also provided to 2 technical staff from Nepal Pharmaceuticals Laboratory Pvt ltd to attend one of the training sessions at VIMTA Labs.

NABL conducted a pre-assessment in February 2012 and DFTQC is currently implementing corrective actions identified in this assessment. It is expected that the laboratory will achieve accreditation later this year.

Output 4.5 *Between 15 and 20 auditors trained for ISO 22000 Food Safety Management System and two companies certified*.

The project organised an awareness seminar on ISO 22000 in 2008. 43 people participated. The project also arranged auditor and lead auditor training conducted at the DFTQC in 200. There were 20 participants of which 17 passed exams giving an 85% success rate.

The project provided support, in partnership FICCI to 2 companies for the development and implementation of a QMS to the standard required for certification to ISO 22000: 1 for the manufacturer of refined edible oil and vegetable ghee and the other for the manufacturer of Instant noodles. Both enterprises were certified in March 2011. The management in one company interviewed expressed satisfaction with the assistance provided. They noted an improvement in reducing food safety risk and the companies implementing ISO 22000 noted an increase in productivity. This resulted from changes in their operating procedures which reduced waste, down time and increased employee accountability.

Output 4.6 *Management System Certification Body of Nepal accredited.*

The project fielded experts to provide on the job training to the NBSM to operate a MSCS to the standards required to meet the requirements of ISO/IEC 17021.2006 and related IAF guidelines. Support was initially provided in 2008 and 2009 to finalize the Management System Regulation under the NBSM Act. Study visits for 5 NBSM staff to SIRIM in Malaysia were also arranged for training in product certification and management system certification. The project also assisted in the procurement, installation of MSCS software and provided training to NBSM in its use. The NABCB carried out a review of the MSCS in early 2011 and since then the project has provided support to the MSCS division to implement corrective actions to meet the requirements for accreditation to ISO 17021; ISO 9001 and ISO 14001 standards.

There appeared to be a high level of ownership among NBSM management and staff and the MSCS is expected to be accredited sometime within the next 18 months provided NBSM continue to receive support from donors to achieve this.

Output 4.7 *Awareness created about SA 8000 and OHSAS 18000 standards*
The project organised 2 seminars on SA 8000 Awareness in Kathmandu and Biratnagar in 2008. Some 60 participants attended from industry and commerce, the consumer forum, government ministries and NBSM.

3 seminar were on OHSAS 18001 were arranged for managers of manufacturing companies in Biratnagar, Birgunj and Bhairahawa in in collaboration with the International Labour Organisation (ILO) in 2009. The 3 seminars were attended by a total of 138 delegates from industry, the Chamber of Commerce and Industry, and senior officials from NBSM as well as other government agencies

Output 4.8 *About 25 managers from industry trained in quality improvement tools and techniques.*
This output was dropped on the recommendation of the MTE.

5.4.2 Outcomes and Impact

As not impact has yet occurred the ways in a potential impact can occur are briefly hypothesized.

BANGLADESH

Outcome 1:

- *BSTI Product Certification Mark perceived as a value addition for the products by Bangladesh Industry.*
- *Establishment of certification system as per ISO Guide 65 will enable BSTI to expand the scope of the accreditation to products such as cement and other products exported to India and other countries. After which it can negotiate agreement with these countries to accept BSTI marked products on reciprocal basis*.

The first paragraph is statement of outcome. The second paragraph is simply a statement of possible future action by BSTI and is not an outcome.

The potential outcome can be more clearly identified as:

- BSTI Product Certification Wing can provide accredited Product Certification Services to international Standards;
- Increase in demand for BSTI PSC services from entreprises manufacturing the products covered by the accreditation who are satisfied with the result;
- BSTI Product Verification Mark perceived as a value addition for the products by Bangladesh Industry; and
- Increase in credibility of the BSTI PSC for product categories covered by the scope of the accreditation.

The activities completed under Output 1.1 contributed to the achievement of this outcome for the products covered by the accreditation.

IMPACT - Outcome 1

As accreditation was only achieved in 2011 it is too early to assess the impact. The occurrence of the impact is dependent on sustainability of the outcomes. See chapter 5.5.

The potential impact is likely to occur at 3 levels:

a) Enterprise level
b) Industry sector level and
c) National economy level

a) Enterprise level
   - Increase in consumer demand and sales for the product categories covered by the scope of the accreditation,

b) Industry sector level
   - Increase in demand for voluntary certification for products covered by accreditation and demand for extension of certification to other products;
   - Expansion of sector as consumer demand increases;

c) National economic level
   - Increase in economic growth driven by expansion of industrial sector;
   - Increase in bilateral and or multilateral agreements on mutual recognition of BSTI mark for product categories covered by accreditation;
   - Increase exports and economic growth;
   - Increase emphasis on the role of quality improvement as driver of economic growth in national economic policy and
   - Reduction in food borne diseases related to product categories covered by certification.

The impact if it occurs will be seen initially at enterprise level with time lags between the impact at the levels of industry and national economy.

The impact on exports is likely to less immediate as demand from exporters is likely to be for certification to trading partners' product standards or international product standards rather than for certification to BDS.

However there will be a potential effect on companies including exporters producing for the domestic market who will require certification to BDS. The intervention can therefore have a potential impact on the quality of products sold on the domestic market and thus indirectly on quality of exports where the same company is exporting.

Outcome 2:

- *Acceptance of test certificates of BSTI textile laboratory by foreign buyer, thereby meeting the strong demand of textile industry for low cost testing to make their exports more competitive resulting in increase of export.*

This statement is a statement of **(a) outcome**: 'acceptance of test certificates of BSTI textile laboratory by foreign buyer'; **(b) assumptions** (i)' the strong demand of textile

industry for low cost testing' and (ii) 'low cost testing make exports more competitive; and **(c) impact** 'increase of export'.

Outcome (a) is partly achieved by the activities completed under Output 1.3. However the range of accredited testing parameters needs to be extended to provide the full range of services required by producers, exporters and buyers before it can be fully realised.

The outcome can be more clearly stated as follows:

- The BSTI textile laboratory can offer accredited testing services to internationals standards acceptable to foreign buyers on a sustainable basis;
- The cost of the testing services to producers and exporters is lower than competitors; and
- Increase in demand from producers, exporters and foreign buyers for BSTI textile testing services who are satisfied with the result.

The achievement of this outcome is dependent on the validity of two assumptions which formed part of the intervention logic. These are that strong demand exists in the textile industry for low cost testing and a lower cost of testing will significantly improve productivity and competitiveness of exporters. If these assumptions are incorrect then the outcome will not be achieved.

Impact - Outcome 2

As the full range of textile testing services has not been accredited it is too early to assess the impact. The occurrence of the impact is dependent on sustainability of the outcomes and the validity of the assumptions underlying them. The potential impact is likely to occur at 3 levels:

a) Enterprise level
b) Industrial sector level and
c) National economy level

a) Enterprise level
   - Increase in productivity and competitiveness due to lower testing costs;
   - Increase in buyer demand due to increased competitiveness;

b) Industry sector level
   - Increase in demand for BSTI textile testing services;
   - Expansion of sector as export demand increases due to increase in competitiveness and lower entry costs for SMEs;
   - Increase in employment in sector;

c) National economic level
   - Increase in economic growth driven by expansion of textile sector
   - Increase in exports and economic growth and
   - Reduction in poverty arising from increase in employment in sector.

Outcome 3:

- *Improved awareness on ISO 22000, and WRAP standards among industrial managers, stated as Outcome 4 in the project document and Outcome 3 in the logframe*.

The activities completed under Output 1.4 contributed to the achievement of this outcome. Additional achieved outcomes can be identified as follows:

- Productivity and competitiveness of 2 food processing entreprises is increased and
- Food safety and quality of products of both entreprises is increased.

IMPACT - Outcome 3

ISO 22000

As the workshop of ISO 22000 certification to ISO 22000 was only completed in 2011 it is too early to assess the impact. The occurance of the impact is dependent on sustainability of the outcomes. The potential impact is likely to occur at 3 levels:

a) Entreprise level
b) Industrial sector level and
c) National economy level

a) Entreprise level
   - Increase in domestic and export consumer demand and sales of both food processing companies due to increased competitiveness arising from increase in productivity, food safety and quality;

b) Industry sector level
   - Increase in demand for certification to ISO 22000 among entreprises in food processing sector as awareness of its role in increasing productivity and competitiveness disseminates through the industry;
   - Expansion of food processing sector as domestic and export demand increases due to increase in competitiveness;
   - Increase in employment in food processing sector;
   - Increased adoption of WRAP standard by enterprises in textile industry. (This in turn should start an impact cycle at enterprise, industry and national economic level).

c) National economic level
   - Increase in food exports and economic growth driven by expansion of export food processing sector
   - Reduction in food borne disease related to products covered by the certification and
   - Reduction in poverty due to Increase in employment and reduced incidence of food borne diseases.

As the full range of textile testing services has not yet been accredited it is too early to measure the impact. However, the occurrence of the impact will be dependent on the validity of the underlying assumptions.

WRAP
Once off workshops are unlikely to produce a significant impact unless the workshops form part of a wider program of support to the targeted industry sector. As this is not the case in relation to WRAP the impact is likely to be minimal.

Outcome 4:

- *Facilities for training on quality management tools and techniques established.*

There were no activities initiated to support the development of facilities for training. The outcome is more correctly defined in the project document as:

- 'Awareness created about quality management techniques among industrial managers'.

The activities completed under Output 1.6 contributed to its achievement.

IMPACT - Outcome 4
However as this was one once off training the potential impact was likely to be minimal unless it acted as a catalyst to increase the adoption of QMS by enterprises and this does not appear to have been the case.

Outcome 5:

- *Government made aware of seriousness of the problem of imported substandard and unsafe food product.*
- *Major deficiencies in system of import control which have been identified by Mr. Daughty the foreign expert can form the basis for planning a special project for establishment of an integrated food regulatory authority including effective system for control of imported food products*

The first part of the outcome has been realised by the activities completed under Output 1.2 despite the weaknesses noted in the developed plan. The second part was overly ambitious and could not be realised from this output.

IMPACT Outcome 5
The impact cannot be assessed until the plan is operationalized and implemented. This assumes that the weaknesses in the plan are addressed in the process. See also chapter 6.

Outcome 6:

- *Availability of low cost management system certification.*
- *Improved credibility of management system certification activity of BSTI*

The activities completed under Output 1.5 have contributed to the achievement of this outcome. This outcome is more clearly stated as

- BSTI MSCS can provide QMS certification services that are internationally recognised for ISO 22000, ISO 14000 and ISO 9001 at lower prices than other providers in Bangladesh and
- Increase in demand from entreprises are seeking certification to ISO 22000, ISO 14000 and ISO 9001 and
- Improved credibility of management system certification activity of BSTI

This outcome has been realised as a result of the completion of activities under Output 1.5. BSTI believes that they can provide these services at a lower cost than Bureau Veritas who the main provider of QMS certification in the private sector in Bangladesh and the certification per se increase the credibility of the BSTI MSCS.

IMPACT Outcome 6

As the accreditation was only completed in 2011 it is too early to assess the impact. The occurrence of the impact is dependent on sustainability of the outcomes. The potential impact is similar to the impact of Outcome 3. It is likely to occur at 3 levels:

a) Enterprise level
b) Industrial sector level and
c) National economy level

a) Enterprise level
   - Increase in domestic and / or export sales of entreprises certified to ISO 9001, and /or ISO 14000 and / or ISO 22000 (due to increased competitiveness arising from increase in productivity).

b) Industry sector level
   - Increase in demand for certification to ISO 22000, ISO 14000 and ISO 9001 among entreprises in food processing sector as role of MSC disseminates in industries, and
   - Expansion of industrial sector as domestic and export demand increases due to increase in competitiveness

c) National economic level
   - Increase in economic growth driven by expansion of industrial sector
   - Increase in employment and
   - Reduction in poverty

BHUTAN

Outcome 1:

- *Easy availability of standards and regulations relating to exportable products*.

The strengthening of WTO TBT Inquiry Point and Standards Information Centre puts a structure in place to facilitate access to information on standards and TBT regulations in export markets. This outcome would be appropriately described as

- BSB capacity for standards development enhanced;
- Improved legislative framework for the national quality infrastructure;

- Capacity to operate a TBT Enquiry Point strengthened in line with WTO accession requirements;
- Increased access for exporters, producers and manufacturers to information on standards and technical regulations and
- Improvement in the business climate.

The activities completed under Output 1 contribute to the achievement of these outcomes. However a non-intended potential outcome is the:

- Introduction of new NTBs from new Bhutanese standards in the construction sector.

The BSB were developing Bhutanese national standards for construction materials which may be applied as mandatory standards requiring mandatory certification for compliance. As existing legislation required compliance with IS and most imported construction material originates in India this will impose a new NTB on trade with India: an outcome which runs contrary to the Project's Development objective.

IMPACT - Outcome 1

It is too early to assess the impact as the BSB has only commenced operations in the area in which its capacity has been strengthened. While the outcome may generate an impact at enterprise level, industry level and national economy level the timing and strength of this impact is contingent on future output of the BSB which makes attribution difficult.

- **NTBs**

The impact of the negative outcome is also likely to be primarily at the Industry sector and National economy levels.

a) Industry level
   - Increase in operating costs due to higher import costs arising from additional certification costs; and
   - Slow economic activity due to higher costs

b) National economy
   - Slower growth.

Outcome 2:

- *Improved awareness of ISO 22000 and SA-8000 standards among industrial managers.*

These activities completed under Outputs 2.5 and 2.6 have contributed to the achievement of this outcome. Additional outcomes in relation to ISO 22000 can be included as follows:

- Productivity and competitiveness of 2 food processing entreprises is increased and
- Food safety increased in 2 hotels certified to ISO 22000.

IMPACT Outcome 2

- **ISO 22000**

The potential impact is likely to be similar to that of the Impact of Outcome 3 in Bangladesh in relation to ISO 22000 for the food processing industry although on a much smaller scale given the different size of the economies.

- **OHSAS**

The comments on the WRAP workshop in Bangladesh also apply to OHSAS workshop in Bhutan. As the workshop does not form part of a wider program of support to the targeted industry sector the impact is likely to be minimal. See also section on Bangladesh IMPACT Outcome 3 above.

The impact on the hotel industry and tourism sector is likely be limited given that the targeted hotels were five star hotels that already operated to international standards in relation to food preparation and at ISO certification was group policy for at least one of them.

Outcome 3:

- *Improved credibility of the test results of BAFRA food laboratory among domestic industry, resulting in more testing and improvement in product quality.*
- *Acceptance of test results by foreign buyers there by avoiding expensive testing of samples from exported food products in foreign labs and making Bhutanese products more competitive.*

This second paragraph is a statement of **(a) outcome:** 'acceptance of test results by foreign buyers' and **(b) impact**: 'making Bhutanese products more competitive'. The increase in product quality and productivity will result from use of the testing services and increase in competitiveness will result from reduced testing costs. It is not clear if the cost of testing is a key factor in determining the competitiveness of exports. However potential reductions in product rejection from better quality assurance enabled by use of BAFRA's laboratory testing services will increase productivity and competitiveness.

The activities completed to date under Output 2.4 has contributed to progress towards these outcomes but they only be realised when the Food testing laboratory of BAFRA is accredited to ISO 17025 and can provide accredited testing services to international standards.

These outcomes are expected to be achieved once the activities are completed under Output 2.4. This is expected to happen within the next 12 months subject to continuing donor support.

IMPACT - Outcome 3

It is too early to assess the impact. As BAFRA has not yet achieved accreditation and testing to date has been on trial basis and not on a commercial basis. The

occurrence of the impact will be dependent on sustainability of the outcomes. The potential impact is likely to occur at 3 levels:

a) Enterprise level
b) Industry sector level and
c) National economy level.

a) Enterprise level
   - Increase in productivity and competitiveness due to lower testing costs for export certification and quality assurance:
   - Increase in productivity and competitiveness due to improved product quality and lower rejection rate; and
   - Increase in consumer demand and sales due to increased competitiveness.

b) Industry sector level
   - Increase in demand for BAFRA testing services for products covered by the accreditation and additional products;
   - Lower entry costs to sector for SMEs' leads to expansion of sector;
   - Expansion of sector as export demand increases due to increase in competitiveness ;and
   - Increase in employment in sector.

c) National economic level
   - Increase in economic growth driven by expansion of food processing sector;
   - Increase in exports and economic growth driven by expansion of textile sector
   - Reduction in food borne diseases related to food products covered by certification – *an unintended impact*; and
   - Reduction in poverty arising from increase in employment in sector and reduction in food borne diseases.

The small size of Bhutan food processing sector is also likely to limit the impact.

Outcome 4:

- *Consumers assured of getting proper quantity of goods purchased by them.*
- *Exporters will be able to demonstrate the accuracy of contents in the packages of processed food exported to other countries.*

These outcomes are not yet achieved. Activities completed under Output 2.3 have contributed to the achievement of these outcomes but they will only be realised when the laboratory is accredited to ISO 17025 for length and mass dimensions and the Weights and Measures Bill is enacted. The BSB metrology laboratory is likely to be accredited and in a position to provide some accredited calibration services on these dimensions within the next year subject to continued donor support. Less progress has been made towards improved compliance with legal metrology regulation mainly due to a lack of agreement between the DoT and BSB on the issue of regulatory responsibility and a lack of resources and technical capacity in the DoT to carry out the regulatory function. The Weights and Measures Bill has been drafted and is expected to be enacted this year. This will require compliance by all commercial entreprises involved in commercial transactions to ensure their weights and

measures are properly calibrated. Implementation of this regulation will increase demand for calibration services.

IMPACT Outcome 4

As the laboratory has not yet been accredited it is too early to assess the impact. The potential impact is likely to occur at 2 levels:

a) SME sector
b) National economy level

a) SME sector
- Increased productivity and competitiveness due to lower industrial calibration costs;
- Increase in sales due to increased competitiveness and increased confidence in export markets in packaging used; and
- Increase in number of SMEs due to lower entry costs arising from local availability of calibration services.

b) National economic level
- Improved business climate: improved confidence in commercial transactions
- Increase in economic growth driven by expansion of SME sector
- Increase in exports and economic growth
- Increased employment
- Reduction in poverty from increase in employment

The impact is likely to be gradual over time. The attribution of an impact to a target outcome for TA for metrology is more difficult to assess than the attribution of an impact to a target outcome for conformity assessment bodies. This is because the availability of local calibration services is arguably less critical than the availability of testing services giving the lower volume demand for calibration services in an enterprise.

Outcome 5:

- *Government made aware of seriousness of the problem of imported substandard and unsafe food product.*
- *Major deficiencies in system of import control which have been identified by Mr. Daughty the foreign expert can form the basis for planning a special project for establishment of an integrated food regulatory authority including effective system for control of imported food products.*

The first part of the outcome has been realised by the activities completed under Output 1.2 despite the weaknesses noted in the developed plan. The second part was overly ambitious and could not be realised from this output.

IMPACT Outcome 5

The potential impact cannot be assessed until the plan is operationalized and implemented. This assumes that the weaknesses in the plan are addressed in the process. See chapter 6 recommendations.

Outcome 6:

- *Awareness created about quality management techniques among industrial managers[9].*

This was dropped on the recommendation of the MTE.

THE MALDIVES

Outcome 1:

- *Easy availability of standards and regulations relating to exportable products.*

The strengthening of WTO TBT Inquiry Point and Standards Information Centre puts a structure in place to facilitate access to information on standards and TBT regulations in export markets. It does not result in 'Easy availability of standards and regulations relating to exportable products'. The targeted outcome is more fully stated as

- MSMC capacity for standards development enhanced;
- Improved regulatory framework,
- Improved regulatory framework;
- Capacity to operate a TBT Enquiry Point strengthened in line with WTO accession requirements;
- Increased access for exporters, producers and manufacturers to information on standards and technical regulations and
- Strengthened national quality infrastructure

The activities implemented under Output 3.1 were designed to achieve this outcome however these were not achieved with the exception of strengthening capacity to operate the TBT Enquiry Point. The reason the outcome was not realised was due to staff shortages which limited MSMC operational capacity.

IMPACT Outcome 1

As much of the targeted outcome in relation to standards strengthening was not achieved the impact will be limited. The potential impact of the WTO TBT Enquiry Point is similar to the Impact - Outcome 1 in Bhutan. See relevant section above.

Outcome 2:

- *Improved awareness of ISO 22000 and OHSAS 18000.*

The seminars completed under Outputs 3.6, and seminars and training activities completed fewer than 3.7 have contributed to the achievement of this outcome in relation to ISO 22000. Additional outcomes in relation to ISO 22000 can be included as follows:

- Productivity and competitiveness of 8 fish processing entreprises is increased and
- Food safety and quality of products of the 8 fish processing entreprises is increased.

[9] This outcome is included in the project document as Outcome 2.

IMPACT Outcome 2

- **ISO 22000**

The impact at enterprise, industry and national economy levels has a similar potential to that outlined for Outcome 2 in Bangladesh but is unfortunately likely to be constrained due to a continuing decline in fish landings. See relevant section above on Bangladesh and chapter 2.3 on the Maldives.

- **OHSAS 18000**

As the MSMC initiated a series of additional workshops in the Atolls to extend and sustain the outcome the potential impact will be greater than the impact of SA 8000 in Bhutan. The impact is likely to occur at industry level but will also be constrained by the declining fishing industry.

Outcome 3:

- *Improved credibility of the test results of MFDA Food Laboratory among domestic industry, resulting in more testing and improvement in product quality.*
- *Acceptance of test results by foreign buyers resulting in reduction of complaints from the buyers and increase in exports*

The same comments made in relation to Outcome 3 in Bhutan apply here. See relevant section above.

The outcome in relation to improved credibility has been achieved as a result of the accreditation. However an increase in demand for testing services is likely to be negatively impacted by the reducing fish landings and raw material supply to the fish processing sector. While foreign buyers already accepted the test results the improvement in credibility from accreditation should reduce the number of complaints.

IMPACT Outcome 3

The potential impact is likely to occur at 3 levels similar to the impact of Outcome 3 in Bhutan. See relevant section above.

Note: As the MDFA microbiology laboratory achieved accreditation in 2008 and the chemical laboratory achieved it in 2010 it may be possible to assess impact at enterprise level at this stage. A laboratory survey has been initiated to assess this impact of any. The results will be reported separately.

Outcome 4:

- *Improved access of Maldives population to legal metrology services.*
- *Consumers assured of getting proper quantity of goods purchased by them.*

The activities completed under Output 3.3 were designed to achieve this outcome. However staff shortages and institutional changes made to address the problem have delayed progress towards accreditation. Additional TA will be required to

achieve these outcomes. The second outcome can only be realised when the Weights and Measures Bill is enacted and given the political uncertainty it is difficult to estimate when this will happen.

IMPACT Outcome 4

When Outcome 4 is achieved it will combine with Outcome 6 below to create an impact that is likely to be similar to the impact of Outcome 4 in Bhutan. See relevant section above.

Outcome 5:

- *Government made aware of seriousness of the problem of imported substandard and unsafe food product.*
- *Major deficiencies in system of import control which have been identified by Mr. Daughty the foreign expert can form the basis for planning a special project for establishment of an integrated food regulatory authority including effective system for control of imported food products.*

The first part of the outcome has been realised by the activities completed under Output 1.2 despite the weaknesses noted in the developed plan. The second part was overly ambitious and could not be realised from this output.

IMPACT Outcome 5

The impact cannot be assessed until the plan is operationalized and implemented. This assumes that the weaknesses in the plan are addressed in the process. See chapter 6 recommendations.

Outcome 6:

- *Seven metrology cells established and metrology services decentralized and available to general population.*
- *Access to metrology services facilitated for far off islands.*

The activities completed under Output 3.3 were designed to support the achievement of this outcome. However staff shortages and institutional changes made to address the staff shortages have delayed progress towards accreditation and will most likely necessitate

IMPACT Outcome 6

Outcome 4 and Outcome 6 should be considered as related outcome which will combine to produce the potential noted above. See this section IMPACT Outcome 4.

Outcome 7:

- *Reduction in the quality risks in the export of fish products*[10]

Activities completed under Outputs 3.5 and 3.6 have contributed to the achievement of this output.

[10] This outcome is noted in the Project Document but not in the logframe.

IMPACT Outcome 7
This achievement of this outcome will contribute to the IMPACT Outcome 3. See relevant section above.

NEPAL

Outcome 1:

- *NBSM Product Certification Mark perceived as a value addition for the products by Nepalese Industry*
- *Establishment of certification system as per ISO Guide 65 will enable NBSM to expand the scope of the accreditation to products such as cement and other products exported to India and other countries. After which it can negotiate agreement with these countries to accept NBSM marked products on reciprocal basis.*

The first paragraph is statement of outcome. The second paragraph is simply a statement of possible future action by NBSM and is not an outcome.

The completed of the activities under Output 4.2 supports the achievement of these outcomes. Although progress has been made towards this targeted result it has not yet been achieved. It may be achieved within the next 12 months but will require additional donor support.

The activities completed under Output 1 contributed to the achievement of this outcome for the products covered by the accreditation. The outcome can be more clearly identified as:

- NBSM Product Certification Wing can provide accredited PSC Services to international Standards;
- Increase in demand for NBSM PSC services from entreprises manufacturing the products covered by the accreditation who are satisfied with the result and
- NBSM product certification Mark perceived as a value addition for the products by Nepalese Industry,
- Increase in credibility of the NBSM PSC for product categories covered by the scope of the accreditation.

An implicit assumption which formed part of the intervention logic was that enterprise demand exists for voluntary product certification and use of the NBSM mark for the products covered by the accreditation.

IMPACT Outcome 1
The impact can only occur when NBSM has achieved accreditation for its PSC. The impact is likely to be similar to the impact of Outcome 1 in Bangladesh. See relevant section above.

Outcome 2:

- *Improved credibility of the test results of DFTQC food laboratory among domestic industry, resulting in more testing and improvement in product quality.*
- *Acceptance of test results by foreign buyers. There by meeting strong demand from the food Industry for low cost testing of food products which will make their product more completive and help in increase of exports*[11].

The same comments apply as to Outcome 2 in Bangladesh, Bhutan and the Maldives. See relevant sections above.

The activities completed to date under Output 4.4 has contributed to progress towards these outcomes but they only be realised when the DFTQC food laboratory is accredited to ISO 17025 and can provide accredited testing services to international standards. The outcome will be achieved within the next 12 months subject to continuing donor support. See recommendations in chapter 6.

IMPACT Outcome 2

The impact cannot be assessed until the outcome has been achieved. The potential impact is likely to occur at 3 levels similar to the IMPACT of Outcome 3 in Bhutan and the Maldives. See relevant sections above. The impact will be greater given the larger size of the food processing sector and economy in Nepal.

Outcome 3:

- *Improved awareness of ISO-22000, SA-8000 and OHSAS-18000 among industry managers.*

The training activities completed under Output 4.7 and seminars completed under Outputs 4.5 have contributed to the achievement of this outcome.

IMPACT Outcome 3

ISO 22000

The same comments apply as to Outcome 3 in Bangladesh. See relevant sections above.

As noted above the impact if it occurs will be seen initially at enterprise level with time lags between the impact at the levels of industry and national economy.

SA-8000 and OHSAS-18000

Once-off workshops are unlikely to produce a significant impact unless the workshops form part of a wider program of support to the targeted industry sector. As this does not appear to have been the case the impact is likely be minimal.

[11] The logframe referred to the Pashmina industry. This has been corrected here to read food industry.

Outcome 4:

- *Acceptance of test certificates of NBSM textile laboratory by foreign buyers.*
- *Low cost testing would lead to improvement of quality of textiles and increase in exports*

The comments made in relation to Outcome 2 in Bangladesh apply here. See relevant section above.

The realisation of these outcomes has been partly achieved by the activities completed under Output 4.4. The NBSM MSCS is expected to achieve accreditation status within the next 12 months subject to receiving additional donor support.

IMPACT Outcome 4

The impact is likely to be similar to that of Outcome 2 in Bangladesh. See relevant section above. The potential is likely to be less given the smaller size of the industry in Nepal.

Outcome 5:

- *Government made aware of seriousness of the problem of imported substandard and unsafe food product.*
- *Major deficiencies in system of import control which have been identified by Mr. Daughty the foreign expert can form the basis for planning a special project for establishment of an integrated food regulatory authority including effective system for control of imported food products*

The first part of the outcome has been realised by the activities completed under Output 1.2 despite the weaknesses noted in the developed plan. The second part was overly ambitious and could not be realised from this output.

IMPACT Outcome 5

The impact cannot be assessed until the plan is operationalized and implemented. This assumes that the weaknesses in the plan are addressed in the process. See recommendations in chapter 6.

Outcome 6:

- Availability of low cost management system certification
- Improved credibility of management system certification activity at NBSM

The same comments applied to Bangladesh Outcome 6 apply here. See relevant section above.

This outcome has not yet been realised although the activities completed under Output 4.6 have contributed to progress in this area. The outcome will be realised within the next 12 months subject to additional donor support.

IMPACT Outcome 6
The impact is likely to be similar to that of the IMPACT of Outcome 5 in Bangladesh. See relevant section above.

Outcome 7:

- Awareness created about quality management techniques among industrial managers[12].

This was dropped on the recommendation of the MTE.

5.5 Sustainability

BANGLADESH

Outcome 1

- BSTI Product Certification Wing can provide accredited Product Certification Services to international Standards;
- Increase in demand for BSTI PSC services from entreprises manufacturing the products covered by the accreditation who are satisfied with the result;
- BSTI product certification Mark perceived as a value addition for the products by Bangladesh Industry; and
- Increase in credibility of the BSTI PSC for product categories covered by the scope of the accreditation.

The BSTI Product Certification Wing prepared a 'sustainability plan' which forecast a positive cash flow of just over 23 Million Taka in 2012 rising to almost 29 Million in 2014 which, if correct, should ensure the sustainability of the intervention. The plan was discussed with the Product Certification Wing management. There was an impressive sense of ownership and commitment to development the PCS to cover all products in accordance with Guide 65.

The issue of sustainability was discussed with the CTA and Technical Adviser of the EU funded, UNIDO managed BEST. Both persons questioned the sustainability of the intervention citing poor governance in BSTI and inadequate staff numbers to manage the PCS. They also noted the monopolistic position of BSTI as the sole provider of product certification services and its role as a regulatory authority for mandatory product certification which covers 170 products. These issues were raised in lengthy discussions with the BSTI Director General (DG). The evaluator expressed the opinion that competitive issues raised by BSTI's monopoly on product certification to mandatory standards could be addressed separately by allowing competition by local providers of product certification services. The DG noted that this would have be approved by the GoB and advised that he would raise the matter with the GoB.

In conclusion competitive issues and the issue of governance in BSTI are more appropriately addressed in direct dialogue between the donor, the GoB and BSTI. Given the accreditation by NABCB for 5 product categories, the extensive information

[12] This outcome is included in the project document as Outcome 2.

provided in the sustainability plans which projected an increase in staff numbers assigned to the PSC and the obvious enthusiasm of the PSC management to extend the accreditation for the PSC to other products including those required for mandatory certification the intervention is likely to be sustainable although additional TA must be provided to ensure the sustainability.

Outcome 2:

- The BSTI textile laboratory can offer accredited testing services to internationals standards acceptable to foreign buyers on a sustainable basis;
- The cost of the testing services to producers and exporters is lower than competitors; and
- Increase in demand from producers, exporters and foreign buyers for BSTI textile testing services who are satisfied with the result.

There was a high level ownership in the BSTI Textile Laboratory management of the result of the intervention and a commitment to ensuring that it is capable of delivering textile testing services to the international standards required by textile exporters and international buyers. BSTI is committed to extending the range of accredited testing parameters to allow it to offer a full service to manufacturers, exporters and buyers. BSTI has purchased equipment for identifying heavy metals present in textiles (AAS) from its own resources to enhance its capacity to deliver these services. It is continuing to implement the marketing strategy developed with the support of the project. It also adequate infrastructure and has a maintenance plan in place for equipment and facilities. It has prepared a sustainability plan which projects shows net income from testing services increasing to over USD 21,000 in 2014 from USD 7,600 in 2012. If the forecast growth in demand for services is correct then the outcome is likely sustainable without subvention from the GOB. This will not become clear until it is operational with a full range of services ofr at least 2 months.

Outcome 3:

- Improved awareness on ISO 22000, and WRAP standards among industrial Managers, stated as Outcome 4 in the project document and Outcome 3 in the revised logframe.
- Productivity and competitiveness of 2 food processing entreprises is increased.

There was a high sense of ownership of the outcome in the one enterprise visited which had been supported for certification to ISO 22000. The motivation for certification was market drive and the enterprise realised significant productivity gains. All of this contributed to the sustainability of this outcome.

The sustainability of the outcome in relation to WRAP is not clear as it was a once off workshop and not clearly linked to a program supporting implementation of WRAP. There was also no evidence that workshop acted as a catalyst for the adoption of WRAP.

Outcome 4:

- Awareness created about quality management techniques among industrial managers.

The sustainability of this outcome was not clear as it was a once off workshop. There was no evidence that workshop acted as a catalyst for the adoption of QMS in enterprises.

Outcome 5:

- *Government made aware of seriousness of the problem of imported substandard and unsafe food product.*

This outcome is likely to be sustainable as BSTI forwarded the plan to the NFSAC where it remains.

Outcome 6:

- BSTI MSCS can provide QMS certification services that are internationally recognised for ISO 22000, ISO 14000 and ISO 9001 at lower prices than other providers in Bangladesh and
- Increase in demand from entreprises are seeking certification to ISO 22000, ISO 14000 and ISO 9001 and
- Improved credibility of management system certification activity of BSTI

BSTI Certification Wing produced a sustainability plan with showed cash flows from certification fees rising from 337,000 in 2012 to 728,000 in 2014. This should support sustainability of the outcome although costs of delivering the MSCS services are not included. The BSTI (Management System Certification) Regulation 2009 provided broad based governance structure the MSCS and this should continue to support its credibility.

BHUTAN

Outcome 1:

- BSB capacity for standards development enhanced;
- Improved legislative framework for the national quality infrastructure
- Capacity to operate a TBT Enquiry Point strengthened in line with WTO accession requirements;
- Increased access for exporters, producers and manufacturers to information on standards and technical regulations and
- Improvement in the business climate.

And negative outcome:

- New NTBs in the construction sector.

There was strong ownership of the outcome in the BSB. The Standards Act 2010 significantly strengthened its mandate. BSB management noted that that the RGoB will continue to provide the necessary finance to allow the BSB continue to expand its operations in the area of standardization, maintenance of the legal and industrial metrology laboratory and the provision of legal and industrial calibration services in line with its 5 year corporate plan. This should ensure the sustainability of the outcome but it will need additional support from donors.

The negative outcome is also likely to be sustainable unless action is taken in Bhutan to recognise certification to IS standards as equivalent to Bhutanese standards.

Outcome 2:

- Improved awareness of ISO 22000 and SA-8000 standards among industrial managers
- Productivity and competitiveness of 2 food processing entreprises is increased and
- Food safety increased in 2 hotels certified to ISO 22000.

The comments to Outcome 3 in Bangladesh above apply here in relation to ISO 22000. The outcome is likely to be sustainable.

The sustainability of the outcome in relation to SA-8000 is not clear as it was a once off workshop and is not clearly linked to a program supporting implementation of SA-8000. There was also no evidence that workshop acted as a catalyst for the adoption of SA 8000.

Outcome 3:

- *Improved credibility of the test results of BAFRA food laboratory among domestic industry, resulting in more testing and improvement in product quality.*
- *Acceptance of test results by foreign buyers there by avoiding expensive testing of samples from exported food products in foreign labs and making Bhutanese products more competitive.*

This outcome is not yet realised but it is likely be achieved within the next 12 months subject to continuing donor support .There was a high level ownership in BAFRA of the result of the intervention and a commitment to ensuring that is capable of delivering food laboratory testing services to the international standards required by exporters and international buyers. BAFRA is committed to extending the range of accredited testing parameters to allow it to offer a full service to producers and exporters. It also had adequate infrastructure and had a maintenance plan in place for equipment and facilities. It has prepared a sustainability plan which showed a positive net cash flow from testing services from 2011. However the principle buyer of the testing services is BAFRA in its role as the regulatory authority. BAFTA is dependent on the ability and commitment of the RGoB to fund its activities. However the RGoB are likely to do so. This will ensure the sustainability of the outcome.

Outcome 4:

- *Consumers assured of getting proper quantity of goods purchased by them.*
- *Exporters will be able to demonstrate the accuracy of contents in the packages of processed food exported to other countries.*

Once this outcome is achieved it is likely to be sustainable. The laboratory infrastructure is adequate for purpose. BSB have put a maintenance plan in place for the equipment and facilities. When the laboratory is accredited BSB will be in a position to provide accredited calibration services which will yield an income although at what level is still not clear. However the comments on the sustainability of Outcome 1 also apply here. The RGoB is expected to provide the necessary funding to support sustainability.

Outcome 5:

- *Government made aware of seriousness of the problem of imported substandard and unsafe food product.*

This outcome is sustainable. See also Chapter 6 Recommendations.

THE MALDIVES

Outcome 1:

- *Capacity to operate a WTO TBT Enquiry Point strengthened in line with WTO accession requirements*

It is unclear if the WTO TBT Enquiry Point is operational due to staff shortages. The MED has notified the WTO that it is WTO TBT Enquiry Point which suggests that it will be operational when the staff shortages are resolved. However additional TA may be required at that point.

Outcome 2:

- *Improved awareness of ISO 22000 and OHSAS 18000.*
- *Productivity and competitiveness of 7 fish processing entreprises is increased*

The comments to Outcome 3 in Bangladesh above apply here in relation to ISO 22000. The outcome is likely to be sustainable.

The sustainability of the outcome in relation to OHSAS-18000 is also likely to be sustainable as the MSMC carried out a series of additional workshops to strengthen this outcome.

Outcome 3:

- *Improved credibility of the test results of Maldives Food and Drug Authority (MFDA) Food Laboratory among domestic industry, resulting in more testing and improvement in product quality.*
- *Acceptance of test results by foreign buyers resulting in reduction of complaints from the buyers and increase in exports*

There was a high level ownership in MFDA of the result of the intervention and a commitment to ensuring that is capable of delivering food laboratory testing services to the international standards required by exporters and international buyers. The MFDA provides a full range of accredited testing parameters to the fishing industry. The infrastructure is adequate and it has a maintenance plan in place for equipment and facilities.

However a caveat exists as its sustainability plan indicated anon-going negative net cash flow from testing services. It showed an operating loss of USD 502,000 rising to USD 548,000 in 2012. This appeared to be directly related to the provision of commercial testing services to the fishing industry rather than to the provision of testing services to the regulatory authorities. It requires a more detailed analysis to assess if this is a subsidy to the industry or high operational costs. Accordingly to the MFDA the GoM will continue to fund the deficit. However this may be questionable as some laboratory equipment has not been not in use since 2009 due to a lack of funding for the essential consumables and funding applications for these have been in the pipeline unapproved since then. This situation did not affect MFDA's operations as they were able to use alternative equipment but it reduced the efficiency of their operations and raised a question mark in relation to the long term sustainability of the outcome.

Outcome 4:

- *Improved access of Maldives population to legal metrology services.*
- *Consumers assured of getting proper quantity of goods purchased by them.*

These outcomes have not been realised and additional TA will be required to achieve them. Staff shortages need to address to ensure sustainability.

Outcome 5:

- *Government made aware of seriousness of the problem of imported substandard and unsafe food product.*

This outcome is sustainable. See Chapter 6 Recommendations.

Outcome 6:

- *Seven metrology cells established and metrology services decentralized and available to general population.*
- *Access to metrology services facilitated for far off islands.*

This outcome has not yet been achieved and is likely to require additional TA to implement. However provided the MSMC are able to solve their staff shortages this is likely to be sustainable.

Outcome 7:

- *Reduction in the quality risks in the export of fish products*[13]

The outcome is sustainable from discussions with the fish producers and exporters.

NEPAL

Outcome 1:

- NBSM Product Certification Wing can provide accredited PSC Services to international Standards;
- Increase in demand for NBSM PSC services from enterprises manufacturing the products covered by the accreditation who are satisfied with the result and NBSM product certification Mark perceived as a value addition for the products by Nepalese Industry, and
- Increase in credibility of the NBSM PSC for product categories covered by the scope of the accreditation.

The outcome is not yet realised but may be achieved within the next 12 months but will require additional donor support. The NBSM Product Certification department prepared a 'sustainability plan' which forecast a positive cash flow in 2011 and 2012 of USD 12.360 and USD 9,300 which suggests that it will be sustainable from a financial perspective. The plan was discussed with management. There was an impressive sense of ownership and commitment to developing the PCS to cover all products in accordance with Guide 65. The outcome once achieved is likely to be sustainable.

Outcome 2:

- *Improved credibility of the test results of DFTQC food laboratory among domestic industry, resulting in more testing and improvement in product quality.*
- *Acceptance of test results by foreign buyers. There by meeting strong demand from the food Industry for low cost testing of food products which will make their product more completive and help in increase of exports*[14]*.*

This outcome is not yet realised but is likely be achieved within the next 12 months subject to continuing donor support. There was a high level ownership in DFTQC and a commitment to ensuring that is capable of delivering food laboratory testing services to the international standards required by exporters and international buyers. DFTQC is committed to extend the range of accredited testing parameters to allow it to offer a full service to producers and exporters. It also has adequate infrastructure and has a maintenance plan in place for equipment and facilities. It has prepared a sustainability plan which showed a positive net cash flow from testing services from 2011 of USD 2480. The outcome once achieved is likely to be sustainable.

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[13] This outcome is noted in the Project Document but not in the logframe.

[14] The logframe refered to the Pashmina industry. This has been corrected here to read food industry.

Outcome 3:

- *Improved awareness of ISO-22000, SA-8000 and OHSAS-18000 among industry managers and*
- *Productivity and competitiveness of 2 food processing entreprises is increased.*

The comments to Outcome 3 in Bangladesh above apply here in relation to ISO 22000. The outcome is likely to be sustainable.

The sustainability of the outcome in relation to SA-8000 and OHSAS-18000 is not clear as it was a once off workshop and was not clearly linked to a program supporting implementation of SA-8000 and OHSAS-18000. There was also no evidence that workshop acted as a catalyst for the adoption of SA-8000 and OHSAS-18000.

Outcome 4:

- The NBSM textile laboratory can offer accredited testing services to internationals standards acceptable to foreign buyers on a sustainable basis;
- The cost of the testing services to producers and exporters is lower than competitors; and
- Increase in demand from producers, exporters and foreign buyers for NBSM textile testing services who are satisfied with the result.

This outcome has not yet been realised but is expected to be achieved within the next 12 months. There was a high level ownership in the NBSM Textile Laboratory management of the result of the intervention and a commitment to ensuring that is capable of delivering textile testing services to international standards required by the textile exporters and in particular Pashima exporters. NBSM is committed to extending the range of accredited testing parameters to allow it to offer a full service.
The NBSM prepared a sustainability plan which net positive cash flow of USD 23.400 in 2012. This is predicated on demand from the Nepal Pashmina Industries Association (NPIA) with whom it has signed a MOU to provide laboratory testing services. The NPIA spend about USD 87,000 on overseas testing. NBSM expected that they will get this business when they are accredited. However during discussions with the NPIA it was evident that they wished to create their own laboratory which would complete with the NBSM laboratory. This intervention is unlikely to be unsustainable without the support of the NPIA.

Outcome 5:

- *Government made aware of seriousness of the problem of imported substandard and unsafe food product.*

This outcome is sustainable. See Chapter 6 Recommendations

Outcome 6:

- NBSM MSCS can provide QMS certification services that are internationally recognised for ISO 14000 and ISO 9001 at lower prices than other providers in Nepal;
- Increase in demand from entreprises are seeking certification to ISO 14000 and ISO 9001 and
- Improved credibility of management system certification activity of NBSM

This outcome is not yet realised but is likely to be achieved within the next 12 months. NBSM MSCS department produced a sustainability plan with showed a positive cash flow of USD 5.850 in 2012 after accreditation is achieved. This should support sustainability of the outcome. The plan was discussed with the management and there was an impressive high level of ownership and commitment to developing the services to international standards. The outcome once achieved is likely to be sustainable.

Note -Sustainability plans: While the requirement for sustainability plans is significant design strength the beneficiary institutions do not use then as a management tool in the way that business plans are used in commercial enterprises. The concept of managing cash flows and planning operations to address shortfalls was also clearly not understood. Strengthening capacity in this area would support was support sustainability.

6. RECOMMENDATIONS

The following recommendations are based on the evaluation findings and on the belief that just as good theory is good practice, good design is good implementation.

A. Recommendations to UNIDO

1. Design for Impact and Sustainability

a) UNIDO should implement the Recommendation 1 of the Thematic Evaluation Report on 'UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ) i.e. 'UNIDO should develop a structured and in-depth approach for SMTQ project preparation, including an assessment of demand and supply of SMTQ services and the identification of needs of SMTQ service users. Processes for project preparation should be clearly defined and consistently applied across the entire SMTQ portfolio'[15].

To implement this recommendation UNIDO should develop a standard methodology for project design, based on LFA, which identifies a targeted impact at the outset in parallel with the overall objective or development objective, defines the outcomes necessary to achieve the impact and sets SMART OVIs to measure the outcomes and impact.

This methodology should prioritise and sequence the inclusion of outcomes in the project design and the allocation of resources on the basis of the timing of the potential impact from each outcome and its relative contribution to the targeted impact for the overall objective. For example strengthened capacity to provide conformity assessment is likely to generate an impact sooner than strengthened capacity in standardisation. If resources are limited then strengthening conformity assessment capacity should be prioritised.

The methodology should require an estimation of the operational costs to the beneficiaries of ensuring sustainability of the outcomes once the intervention is complete. It should also seek to optimise the proposed solution to minimise these. Where the costs are prohibitive alternative solutions should be proposed. It should require that these costs are discussed with the counterparts, beneficiaries, and national governments and that an agreement is reached before the design is finalised that the beneficiaries will provide the necessary funding before project implementation

b) UNIDO should establish a minimum standard for project contextual analysis which includes in-depth problem analysis and stakeholder analysis at the project design and formulation stage and ensures that sufficient economic

[15] P, 93, Thematic Evaluation Report on 'UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ), Bennett, B ;Keller, D & Loewe P; UNIDO, Geneva, 2010.

data is provided to set baselines for OVIs at each stage of the LFA hierarchy to allow at least a qualitative assessment of outputs, outcomes and impact using the methodology recommended under (a)[16].

2. Sectoral or value chain approach

a) UNIDO should adopt a sector or value chain approach in designing STMQ or infrastructure support programs. This could increase the efficacy of the design to achieve a targeted impact and minimise the time lag to achieving impact.

b) UNIDO should consider an integrated approach, applying expertise from all its branches, to develop a national intervention strategy for each country. Such an approach, for example, could integrate support provided for ISO certification and development of testing capacity for the provision of conformity assessment services to entreprises in value chain approach for an export diversification program. Potential synergies would accentuate the sustainability and impact

This is in accordance with Recommendation 8 of the Thematic Evaluation Report on 'UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ)[17].

c) UNIDO should ensure that if the project is designed with an 'Aid for Trade' strategy the overall objective and targeted impact should be trade related and the scope limited to trade related issues. For example strengthening import controls should be targeted primarily to eliminate the competitive risk to domestic production rather than for a reduction in food borne diseases.

3. Regional and National Interventions

a) Regional interventions under an 'Aid for Trade' strategy should include specific outputs targeted at identifying and removing technical barriers to trade and other NTBs.

b) Interventions should be at national level rather than regional level unless there are specific regional objectives that are to be addressed requiring direct

[16]In the Project under review this would require, for example in the agri-food sector an estimate of (a) demand for conformity assessment services (laboratory testing and certification) and (b) existing supply of services. This is necessary to estimate the degree to which the outcome can generate an impact. If strengthening one laboratory only covers 5 per cent of the capacity required to meet the demand then the impact will be less than if it covered 50 or 100 per cent. For the similar reasons the national quality infrastructure should be mapped and capacity assessed. An industry and value chain analysis is also necessary for a quantitative analysis of the potential impact.

[17] Ibid footnote 5.

participation by the regional members. This should allow more focused and efficient implementation.

c) The scoping of interventions for institutional strengthening in small countries, particularly LDCs should seek the most cost effective solution in terms of the long term cost to the national budget. This should consider agreements with neighbouring countries to provide services which cannot be provided in a cost effective manner in the LDC.

4. Project reporting

a) UNIDO should apply international standards to reporting requirement for all international and local experts. This should include requirements on fond size, inclusion of page numbers, table of contents, headings etc.

b) UNIDO should require 2-3 page quarterly progress reports which summarise progress using the LFA framework in terms of outputs, outcomes and the development or overall objective.

B. Key recommendations to TCB Branch

The following recommendations are made in the context of the evaluation findings to achieve as yet unrealised outcomes and to ensure the sustainability of the outcomes achieved under Phase II.

REGIONAL

1. Identify in the agri-business sector, key NTBs to SAARC LDC trade with other members and seek a common approach with SARSO to eliminate them.

BANGLADESH

1. **BSTI - Textile lab**: Provide support for accreditation for about 16 additional parameters required to provide full service to customers in textile sector.

   This is necessary to complete the accreditation process begun under Phase II. It is without which the intervention is not sustainable. The textile laboratory must be in a position to offer a full range of services if it is to meet its customers' needs. The underlying argument supporting this intervention remains valid: a public textile laboratory is necessary to provide services at competitive prices to small domestic companies trying to enter the market to allow them to compete with the multinationals.

2. **BSTI - PSC**: Provide continued support but for certification to international product standards required by exporters in the food processing sector.

3. **BSTI MSCS**: Provide some additional training and support for the development of an in house training program.

BHUTAN

1. **BSB –Standardisation**: Provide support for standards development but focus on standards designed for exports in the agri-business sector to ensure TA is trade related. Provide support also for participation in SARSO.

2. **BSB – Standardisation**: Advise the BSB that Bhutanese standards should not be used to restrict between Bhutan and India. Propose that certification to IS standards by internationally recognised certification bodies is equivalent to certification to Bhutanese standards where both standards are equivalent to ISO/IEC standards. Otherwise requiring mandatory certification to Bhutanese standards will introduce an unnecessary NTB, incur additional cost to Indian exporters and increase construction costs in Bhutan.

3. **BSB product certification**: Assess if demand exists for export product certification to international standards for food products. If demand exists provide support to the BSB PCS provided no NTBs are introduced.

4. **BSB - Legal Metrology Laboratory**: Support extension of accreditation for to other dimensions to strengthen capacity to deliver calibration services to industry.

5. **DoT, MoEA**: Provide support to strengthen inspection capacity for legal metrology. This may necessitate provision of equipment.

6. **BAFRA** – Import Controls and HACCP audits
   a) Provide support to strengthen food safety legislation in relation to MRLs, additives, pesticides and contaminants.
   b) Consider using generic SPS measures to require compliance with relevant CODEX standards as this will avoid the need to develop complex legislation and or food safety standards;
   c) Provide support to strengthen capacity for: risk assessment , inspection, sampling, manuals ,etc ; and
   d) Provide support to strengthen food safety controls at border inspection points through the development of inspection manuals, sampling, and the provision of inspection equipment for inspection sampling and transport of the samples; and
   e) Provide support to strengthen food safety controls at export plants through use of HACCP audits; inspection, market surveillance; export certification etc

7. **BAFRA - NQCL** Provide continued support for accreditation for the Chemical laboratory and Microbiology laboratory

THE MALDIVES

1. **MFDA** – **Import controls & HACCP Audits**
   a) Provide support to strengthen food safety legislation in relation to MRLs, additives, pesticides and contaminants.

b) Consider using generic SPS measures to require compliance with relevant CODEX standards as this will avoid the need to develop complex legislation and or food safety standards;
c) Provide support to strengthen capacity for: risk assessment , inspection, sampling, manuals ,etc ;
d) Provide support to strengthen food safety controls at border inspection points through the development of inspection manuals, sampling, and the provision of inspection equipment for inspection sampling and transport of the samples; and
e) Provide support to strengthen food safety controls at export plants through use of HACCP audits; inspection, market surveillance; export certification etc[18]

2. **MFDA:** Develop a pilot program with the MFDA to roll-out HACCP to small dried fish exporting entreprises.

3. **Maldives Polytechnic:** Provide support to set up and manage an industrial metrology laboratory for mass, length & volume and to enable traceability for legal metrology.

4. **MSMC and Atolls Councils:** Provide support to ensure the Weights & Measures Cells in the Atolls operate effectively.

5. **MFDA - Operational deficit:** Carry out a detailed audit of the MFDA sustainability plans and operational costs to determine if the operational deficit is a subsidy to the fishing industry or the result of high operational costs. This will require that the cost of services and the sales prices for services are benchmarked against similar providers of laboratory testing services in the region.

NEPAL

1. **NBSM Product Certification**: Provide support for the accreditation program in place. Once this is completed additional support should be for certification to international product standards required by exporters in the food processing sector

2. **NBSM MSCS**: Provide support for accreditation and development of in house training program.

3. **DFTQC CFL:** Provide support for the current accreditation program and to extend the scope of accreditation.

[18] The MDFA comment 'In addition to these recommendations it is suggested that the laboratory be provided with equipments, training and other resources for further development of new tests and enhance accreditation towards for those new tests which are considered to be important for the export, import and consumption within the country.

4. **DFTQC -Import controls:**
   a) Provide support to strengthen food safety legislation in relation to MRLs, additives, pesticides and contaminants.
   b) Consider using generic SPS measures to require compliance with relevant CODEX standards as this will avoid the need to develop complex legislation and or food safety standards;
   c) Provide support to strengthen capacity for: risk assessment , inspection, sampling, manuals ,etc ;
   f) Provide support to strengthen food safety controls at border inspection points through the development of inspection manuals, sampling, and the provision of inspection equipment for inspection sampling and transport of the samples; and
   g) Provide support to strengthen food safety controls at export plants through use of HACCP audits; inspection, market surveillance; export certification etc

5. **DFTQC**: Develop a pilot roll out program for the implementation of HACCP food safety risk management system to SMEs.

ALL LDCS - Implementation of recommendation for Phase III

1. **Scope and cost**

a) Carry out an assignment to scope and costs the extent of intervention required to implement each recommendation above in consultation with stakeholders;
b) Estimate the operational costs to the beneficiaries on completion of the intervention and where appropriate review interventions to propose and implement a more cost effective solution.

1. **Import Controls:**

a) Review the import plan prepared under Phase II and limit the scope any proposed implementation to strengthen the capacity regulatory responsibility of the CA to respond to perceived risks and carry out official controls in its area of responsibility in line with Recommendation 4 for each country in Section B above.
b) In cooperation with the national counterpart identify and classify existing risks
c) Benchmark plan against existing controls in country of similar size where controls are consider adequate such as for example Belize.
d) Estimate resources required for effective implementation;
e) Discuss with beneficiary and propose a cost effective solution within projected funds available to regulatory authorities to implement plan.
f) Secure a commitment from the regulatory authorities & government responsible to provide the necessary operational funding once the intervention is completed.

2. **Sustainability Plans:** Provide TA to upgrade the sustainability plans to business plans and to build capacity in preparing the plans and in using them as a management tool.

B. NORAD

1. NORAD should allocate sufficient funds to UNIDO for detailed project formulation and design to implement the systematic approach recommended under Recommendation 1 in section A above.

   This is recommended in order to optimise effectiveness and impact and to ensure better value for money. It is also recommended on the basis of the principle that good theory is good practice good design is good implementation.

7. LESSONS LEARNED

A. Design for Impact

Good project formulation and design within a logical framework can increase project effectiveness. Designing for impact by using the forecast potential impact of targeted outcomes as a key criteria for the inclusion, prioritisation and sequencing of activities, outputs and outcomes could increase the benefits to the stakeholders and beneficiaries as only outcomes with strong potential impacts would be included. Potential outcomes with lower levels of priority could be sequenced for inclusion in further phases of the project. This could increase the effectiveness and efficiency of the project. Some examples of areas based on the findings of Chapter 3.3 where is this relevant are:

a) Support to production certification in Bangladesh and Nepal

Support for certification to national standards delivered benefits to food producers as it strengthened the quality of domestic food products and the national quality environment. However support for certification to international product standards would have been more beneficial to exporters as it would have facilitated intra SAARC trade in the short term and contributed more to the achievement of the overall objective. This represents an opportunity cost to exporters as they must continue to seek these services overseas at a higher cost. If the inclusion of outcomes in the project design was based on potential impact on exports then it is likely that support to developing capacity for certification to international standards would have been prioritised over support for certification to national standards.

b) Support to Standardisation in Bhutan and the Maldives

Given the limited resources available rather than provide support to standardisation in Bhutan and the Maldives the intervention could have focused solely on the development of the food testing laboratories and conformity assessment services for the agri-business sector. Support for standardisation could have been scheduled at later date in a follow-up phase. Targeted trade related outcomes could then have arguably been achieved earlier with the additional resources. A later time frame for accreditation of the laboratories and certification of enterprises to ISO 22000 represents an opportunity cost to the exporters and to the laboratories.

c) Inclusion of once off workshops on quality management, WRAP, SA 8000 and OHSAS 18000

As noted in Chapter 6 the sustainability of once off workshops is questionable. If the inclusion of the activities was assessed on the basis of their potential impact and contribution to the overall objective it is probable they would have not have been included in the project design. Since these resources could have been used elsewhere they represent an opportunity cost to the other beneficiaries.

Designing for impact would require at least a qualitative assessment (or ideally a quantitative asessment of the potential impact of the targeted at the design stage of the project. This would form part of problem analysis and stakeholder analysis workshops in which all the stakeholders and beneficiaries would participate. For example an estimation of the impact Outcome 1 on Product Certification in Bangladesh would require a qualitative or quantitative estimate of:

- Demand for product certification services by product or sector;
- Capacity to provide product certification services by product or sector;
- Local cost of the service;
- Cost of outsourcing overseas;
- Importance as a variable in the competitiveness of exporters;
- Industry or sector analysis;
- Etc.

As noted above quantitative data is preferable than qualitative estimates. However getting precise data is likely to be very difficult and consensus qualitative estimates of potential impact by public and private sector stakeholders are preferable to no data at all.

Designing for impact would also reduce the cost of a post intervention impact assessment as it would establish a benchmark for the evaluation. .

ANNEX 1 LIST OF PERSON CONSULTED DURING EVALUATION MISSION PROCESS

Annex 1 Persons consulted during the evaluation

UNIDO HQ

Name	Position	Institution
Mr. Ouseph Padickakudi	Project Manager	UNIDO HQ
Mr. Steffen Kaeser	Unit Chief, Quality Standards & Conformity Unit. TCB	UNIDO HQ
Mr. Pradeep Paulose	Project Management Team	UNIDO HQ
Ms. Daniela Nikolic	Project Management Team	UNIDO HQ
Mr. Peter Loewe	Senior Evaluation Officer Evaluation Group	UNIDO HQ

BANGLADESH

Name	Position	Institution
Mr. A. K Fazlul Ahad	Director General	BSTI
Mr. K.H. Masud Siddiqui	Secretary,	MoI
Mr. Md. Abdur Rashid	Asstt. Director (Elec.) & Nation Project Counterpart Coordinator	BSTI
Mr. Md. Lutfor Rahman Khan	Director (CM)	BSTI
Mr. Md. Akhtaruzzman	Director (Chemical), Head of MSC	BSTI
Mr/ Khalilur Raham	Director Admin	BSTI
Mr. Nurul Amir	Deputy Director Admin	BSTI
Mz. Joyshee Das	Standards Wing. MSC	BSTI
Prof. Md.Abdul Hannan	Rector,	ESCB, IEB
Ms Shamim Ana Begum	Deputy Director Textiles Laboratory	BSTI
Mr. Md. Abul kalam Asad Khan	Textiles Laboratory	BSTI
Mr. Md Taher Jamil		
Mr. Md. Nural Islam	Deputy Director CM Wing	BSTI
Mr. Md Nozir Ahmmod Miah	Assistant Director, Certification Marks	BSTI
Mr. Noor Ferdous	General Manager	PRAN Foods Ltd
Mr. Arifur Islam	Assist General Manager	PRAN Foods Ltd
Mr. Rasel Kabim	Manager HRM QMS	PRAN Foods Ltd
Mr. Md Toslem Uddir	Quality controller	PRAN Foods Ltd
Mr. Rajinder Raj Sud	Technical Adviser	BEST-BQI
Mr. David Holbourne	CTA	BEST Progamme
Mr. Ehsan Ul Fattah	Secretary General	BGMEA

Mr. Md. Shariful Alam	Chief Executive	Safety & Quality Systems
Mr. Arun Kumar Mandal	Food safety consultant	Savoy Ice Cream factory
Mr. A.K.M. Shamsuddin	Local consultant – Laboratory survey	UNIDO

BHUTAN

Name	Position	Institution
Mr. Karma Wangdi	Head	International Relations Division, BSB
Mr. Tashi Wangchuk	Head	Laboratory Services Division, BSB
Ms Leki Choden	Head Of Metrology	BSB
Ms Barsha Gurung	Regulatory & Quarantine Officer	BSB
Ms. Tashi Pelden,	Engineer	BSB
Mr. Karma Dorji	Executive Director	BAFRA
Mr. Jamang Phuntsho	Chief Laboratory Officer	National Food Technology Laboratory (NFTL) BAFRA
Ms Gyem Bidha,	Laboratory Officer. Food Safety Officer,	BAFRA , MoAF
Dr. J.R. Gurung	Specialist,	BAFRA, MoAF
Mr Karma Wangchuk	Chief Trade Officer	Export Promotion Division, Dept. of Trade
Ms Binita Uadon	Office	Legal Metrology, Dept. of Trade
Mr. Devi Saran Tewari	Metrology Consultant on Accreditation	UNIDO
Mr. Kesang Wangdi	Secretary	Bhutan Chamber of Commerce and Industry
Mr Gyem Dorji	Managing Director	Bhutan Agro Industries Ltd
Ugyen Rinzin	Sr. General Manager	AWP Gelephu Distillery
Mr. Arun Kumar Reddy	Executive Chef	Taj Tashi
Mr Langa Dorji	Program Coordinator	Department of Employment
Mr. Sonam Phuntsho	Local consultant – Laboratory survey	UNIDO

THE MALDIVES

Name	Position	Institution
Ahmed Migdhad	Counterpart Coordinator	MED
Mr Shiham Mohamed Washeed	Deputy Minister	MED
Mr. Yusuf Riza	Permanent Secretary	MED

Ms Aishath Sahma	Fair Trade Consultant	MED
Ms Thooma Adam	Senior Microbiologist, NHL head	MFDA
Ms Mariyam Shabeena Ahmed	Senior Scientific officer, Food Safety Division Head	MFDA
Ms Fathimath Safoora	Scientific Officer, Technical Manager, Chemistry,	MFDA
Mr. M. A. Sruvivasa		Central Food Technological Research Institute, Mysore, India
Mr. Yasir Waheed	Secretary General	MSPEA & CEO Cyprea Marine fisheries
Mr. Abdul RazzaqYoosuf	General Manager	Horizon Fisheries
Mr. Ibrahim Shaheem	Deputy Manager	Horizon Fisheries
Mr Mohammed Nasyam Moosa	Production Supervisor	Horizon Fisheries
Mr. M.P.Nizar	Quality Controller	Horizon Fisheries
Mr. Ahmed Shazwin	Project Manager	Cyprea Marine Fisheries
Mr. K. Sreejirtrh	Quality Controller	Cyprea Marine Fisheries
Mr M. Subhash	Head of Division, Cargo Services	Malé International Airport
Mr Sultan Rasheed	Assistant Manager, Cargo Services	Malé International Airport
Mr Mohamed Rameez	Supervisor, Cargo Services	Malé International Airport
Mr. Ismael Ali	Assistant Lecturer	Maldives Polytechnic
Mr. Rilwan Mohammed	Assistant Lecturer	Maldives Polytechnic
Mr. Nasir Jamaal	Assistant Lecturer	Maldives Polytechnic
Mr. Solih Hussain	Local consultant – Laboratory survey	UNIDO

NEPAL

Name	Position	Institution
Mr Ramadhur Sah	Director General	NBSM
Mr. Poorna Prasad Manandhar	Former NPC (Voluntary) UNIDO NPC EU WTO Project EU	UNIDO
Mr Gajendra Kumar Paudyal	Under Secretary (Tech)	NBSM
Mr. Shailesh K.Jha	Chemist	NBSM
Mr Indu Bikram Joshi	Director QMS	NBSM
Mr. Prabhat Kumar Singh	Director Product Certification	NBSM
Mt Atok Kumar Mishra	Inspector Product Certification	NBSM
Dr Jiwan Priva Lama	Director General	DFTQC
Mr Bihaye Prasad	Senior Research Officer	DFTQC

Shrestha		
Mr. Mahipal Ram Badiya	Senior Research Officer	DFTQC
Mr MohanKrishna Maharjan	Senior Research Officer	DFTQC
Mr Krishna Prasad Rai	Food Research Officer/Technical Manager	Chemical Laboratory , DFQC
Mr Ajay B Pradhanang	Managing Director	Fleur Himalayas Lld, FNCCI
Ms Jeevan Kanaskar	Director	FNCCI
Mr. Sachit Nelipane	Senior Manager	C.G. Foods (Nepal) Pvt Ltd
Mr. Q..C. Ullwal	Admin Manager	C.G. Foods (Nepal) Pvt Ltd
Mr Pushpaman Shrestha	Managing Director	Nepal Pashima Industry Association
Mr. Chiranjivi Kalfe	Managing Director	Everest Cashmere Industry
Mr. Shanker Pandeya	I.P. President	Nepal Pashima Industry Association
Mr Shiva Kumar Shrestha	Managing Director	Dhaulagire Industry
Mr. Dev Bahadur Gurung	ExecutiveDirector	Gandaki International
Mr. Dharma Rai Shrestha	Proprietor	Shiva Shati Bee Keeping Resource Center
Mr. Raju Khatiwada	Proprietor	Namest Mount Everest Honey Pvt. Ltd
Mr. Surendra Kumar	Proprietor	KBC Honey
Dr. G. M. Tewari	Consultant on Accreditation –Food Testing Laboratory	UNIDO
Mr. Biveka Nand Singh	Local consultant – Laboratory survey	UNIDO

ANNEX 2 LIST OF DOCUMENTS REVIEWED

PROJECT DOUCMENTS

BANGLADESH

2008 - 09	Mr. Alan Rowley: Technical Reports and Recommendations in regard to the BSTI Textile Testing Laboratory.
2008 - 11	Mr. Subramanian: Mission reports and Records of TA provided to BSTI textile Testing BSTI and to Interstoff Apparels Ltd.
	Final report based on the work of Mr. Subramanian: Mission reports and Records of TA provided to BSTI textile Testing BSTI.
2008 - 11	Mr. De Silva – 6 Mission reports of TA provided to BSTI Certification Wing on Product Certification System
2008	Mr. Mircea Dauthy: Report on ' Development of Quality Control System for imported food; Plan for quality control of substandard and / or potentially hazardous imported food products.
2009	Report based on work of Mr. Thendrup Graendsen & Ms. Anne Graendsen of TA to BSTI Certification Wing on MSCS.
2009	Report based on the work of Mr. Avedis H. Seferian on Awareness seminars on the Worldwide Responsible Accredited Production (WRAP) standard among industry personnel.
2009	Report based on the work of Md. Moniruzzaman Sarker ' Market Study on the Sustainability' of BSTI Textile Laboratory in Bangladesh.
2009	Based on the work of Mr. Sohrab (Establishment of BSTI Management Systems Certification, ' Management System Certification.
2010	Mr, Akhilesh N. Singh: Report on Training 'Modern Quality Improvement Tools & Their Applications training on Quality Management'.
2011	Mr. Thendrup Graendsen, Lead Assessor Report on to BSTI Certification Wing on MSCS.
2012	Report Based on the work of Mr Appaji Rao Talasila on 'Training on GMP/GHP/HACCP Auditing.
2008 - 12	Sustainability plans prepared by BSTI Certification Wing for the PCS and MSCS.

2008-11 Steering Committee Minutes – 3 reports

2008-11 Study tour reports to Malaysia, and India.

BHUTAN

2008 Report Based on the work of Mr Atul Kumar ' Developing a TBT Enquiry Point at SQCA and its Application in Trade

2008 Based on the work of C J Jenkins **'**Legal Metrology in Bhutan'

2008 Mr. Mircea Dauthy: Report on ' Development of Quality Control System for imported food; Plan for quality control of substandard and / or potentially hazardous imported food products.

2009 Based on the work of Mr. A. Vellingiri, 'Mission Report – Metrology Metrology '.

2009 Based on the work of Dr. Sushil Kumar Saxena Technical report: Technical Assistance to NQCL-BAFRA for Accreditation'

2010 - 11 Based on the work of Dr. Gyanendra Mohan Tewari 'Technical reports Technical Assistance to NQCL-BAFRA for Accreditation'.

2010 Based on the work of Mr. LS Tanwar 'Legal Metrology in Bhutan'.

2011 Based on the work of Mr.Sujit Patel 'Laboratory Equipment Maintenance and Repair'.

2008 - 12 Sustainability plans prepared by BAFRA.

2008-11 Steering Committee Minutes – 4 reports.

2008-11 Study tour reports to Bangladesh, Kenya, Paibare, Philippines, India Vimta Singapore, & Thailand.

THE MALDIVES

2008 - 09 Mr. Alan Rowley.' Technical Reports on Chemistry Section of the NHL of MFDA.

2008 Based on the work of Mr. Moulali Chittboyina, 'Legal Metrology'.

2008 Based on the work of Mr. Atul Kumar Bahl on 'Developing TBT Enquiry Point at MEDT/MSMU and its Application in Trade'**.**

2008 Mr. Mircea Dauthy: Report on ' Development of Quality Control System for imported food; Plan for quality control of substandard and / or potentially hazardous imported food products.

2009 Mr. Ashok Kapur, Report on 'OHSAS 18001 : 2007 Awareness Seminars'.

2009	Based on the work of Mr. Steve Roberts. 'Mission to Assist the Maldives Authorities and Fishing Industry Sector on Strengthening Market Access Procedures for Fishery Products'.
2010	Based on the work of Mr Ayman Abu Zaarour: Technical report on TA for ISO 22000.
2010	Based on the work of Mr. L. Tanwar. 'Mission report Legal Metrology'.
2008-2012	Sustainability plans prepared by MFDA
2008-11	Steering Committee Minutes – 4 reports
2008-11	Study tour reports to Bangladesh, China and India.

NEPAL

2007	Mr Babar Mahal, DFTQC, 'Nepal Residue Monitoring Plan for Honey - for Export of Honey To The European Union.
2008	Mr. Poorna Prasad Manandhar, NPC Final Report.
2008 - 09	Based on the work of Mr. Sylvain Monnereau. 4 Mission reports on TA to NBSM for MSCS.
2008 - 09	Based on the work of Dr. SK Saxena , 2 Technical reports on TA to CFL-DFTQC for Accreditation.
2009	Mr. Ashok Kapur, Report on 'OHSAS 18001 : 2007 Awareness Seminars'.
2009	Based on the work of Mr. Tika Karki. 'Quality Control of imported food products'.
2009	Based on the work of Mr. Mircea Dauthy. ' Develop a Food Safety / Quality Control System for imported food products in Nepal'.
2009	Mr. Laxmi Gupta.' Potential Demand of ISO 9001 and ISO 14001 in Nepal.
2010	Mr. Sankaran Subramanian. 'Technical Report on conducting appraisal of the current status of the Textile Laboratory of NBSM'.
2010	Based on the work of Mr. Senthilnathan Palvannan, Technical report on TA to CFL-DFTQC for Accreditation.
2011	Based on the work of Mr Parama Iswara Subramaniam 'Training and consultancy services to the Nepal Bureau of Standards and Metrology (NBSM) in the area of MSC'.
2008-11	Steering Committee Minutes – 3 reports

2008-11 Study tour reports to Bangladesh, China and Malaysia.

GENERAL

2007 'Independent Evaluation of Market Access and Trade Facilitation Support for South Asian LDCs, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II' UNIDO, Vienna, Austria.

2008 Based on the work of Mathias Schaetz; 4 reports on ,: 'Assistance provided in the implementation of SAARC – SMTQ Phase II Project.

2008 Final Report Based on the work of experts carried out under Sub Contract Activity Awarded to FICCI, New Delhi, India on ISO 22000 Food Safety Management Systems Awareness Seminar and Auditor/Lead Auditor Training Courses carried out in Bangladesh, Bhutan, Maldives & Nepal.

2008 Mr. Mircea Dauthy: Report on ' Development of Quality Control System for imported food; Plan for quality control of substandard and / or potentially hazardous imported food products –India.

2008 Based on the work of Mr. Vic Thorpe, Report on Workshops on Social Responsibility As A Business Development Tool in Bhutan and Nepal.

2009 Mr. Hamidul Hoque Report of National Evaluator (Mid Term) 'Independent Evaluation of Market Access and Trade Facilitation Support for South Asian LDCs, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II'.

2010 UNIDO. (Mid Term) 'Independent Evaluation of Market Access and Trade Facilitation Support for South Asian LDCs, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II' UNIDO, Vienna, Austria.

2010 Mr. K.P. Singh; Proposal for Market Access and Trade Facilitation Support for South Asian LDCs, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) – Phase III.

2009-10 Management response to recommendation of the Mid Term Independent Evaluation.

2007-11 Progress report Progress Report covering November 2007 – March 2012.

2008-11 Steering Committee Minutes – 4 reports.

2008-11 Sub-contract reports

OTHER PROJECT DOCUMENTS

- Certificates of accreditation issued to BSTI PSC, MSCS and BSTI textile laboratory Interstoff Laboratory, and the MFDA.

- Certification issued for certification to ISO 22000 to various entreprises in all countries and on HACCP to Male International airport.

- Feedback from ISO 22000 certified entreprises in accordance with the standard.

OTHER REPORTS

Bennett, B., A. Graffham, et al. (2008) ' Mid Term Evaluation of the Bangladesh Quality Support programme (BQSP) and Formulation of the Better Work and Standards (BEST) Programme. Brussels , European Union.

Bennett, B, Daniel Keller and Peter Loewe 'Thematic Evaluation Report on 'UNIDO activities in the area of Standards, Metrology, Testing and Quality (SMTQ), UNIDO, Geneva, 2010

European Commission (2007). "Bangladesh –European Community – Country Strategy Paper for the period 2007-2013." Brussels, European Commission.

European Commission (2007). "Bhutan –European Community – Country Strategy Paper for the period 2007-2013." Brussels, European Commission.

European Commission (2007). "The Maldives –European Community – Country Strategy Paper for the period 2007-2013." Brussels, European Commission.

European Commission (2007). "Nepal –European Community – Country Strategy Paper for the period 2007-2013." Brussels, European Commission.

Government of Bangladesh (2005). 'Unlocking the Potential: National Strategy for Accelerated Poverty Reduction'. Dhaka, Bangladesh, November 2005.
Government of the Maldives 'Vision 2020' Ministry of Planning and Development, Male, the Maldives.

Government of the Maldives '7th National Plan 2006-10, Ministry of Planning and Development, Male, the Maldives.

Government of Nepal (2007), Three-Year Interim Plan Approach Paper, Kathmandu, July 2007.

Royal Government of Bhutan (2007), Tenth Five Year Plan 2008-13, Gross Happiness Commission, Royal Government of Bhutan.

Manandhar , Poorna Prasad (2012), 'EC-Nepal WTO Assistance Program Project Completion Report', February 2012, UNIDO, Vienna, Austria.

ANNEX 3 LOGFRAME REVISED AUGUST 2010

- **Bangladesh**

#	A – Outcome	B – Baseline	C – Indicator	D – Sources of verification	E – Risks and assumptions
1.	BSTI product certification Mark perceived as a value addition for the products by Bangladesh Industry Establishment of certification system as per ISO Guide 65 will enable BSTI to expand the scope of the accreditation to products such as cement and other products exported to India and other countries. After which it can negotiate agreement with these countries to accept BSTI marked products on reciprocal basis.	At present the BSTI Mark is not recognized in other countries. A number of products covered by the BSTI Mark cannot be exported to India unless the manufacturers in Bangladesh get an ISI Mark license from BIS, involving additional cost and time.	Accreditation of BSTI product certification scheme Number of agreements for mutual acceptance of product certification mark between standard bodies Number of additional product certification licenses	IAF data. BSTI record of licensees. Export data	It is assumed that: BSTI will establish an effective market surveillance mechanism to improve credibility of BSTI mark. The product certification mark will be properly marketed by highlighting its benefits. Product certification activity is prone to being corrupted which is a risk in achieving desired outcomes
2.	Acceptance of test certificates of BSTI textile laboratory by foreign buyer, there by meeting the strong demand of textile industry for low cost testing to make their exports	At present foreign importers do not accept test reports of BSTI laboratories. As such, products for export are tested in expensive private	Textile lab accredited Number of samples of export products tested and consequent increase in exports	ILAC data BSTI records Chambers of commerce and	It is assumed that the services of the accredited textile test laboratory will be properly marketed

#	A – Outcome	B – Baseline	C – Indicator	D – Sources of verification	E – Risks and assumptions
	more competitive resulting in increase of export.	accredited labs in Bangladesh or foreign test labs, adding to costs, which affect competitiveness. Very few products for domestic market are sent for testing in BSTI because of poor credibility of test results.	Number of samples of products for domestic sales tested.	industry	assuring regular calibration of test equipment through calibration facilities in Bangladesh or neighbouring countries can pose a significant risk. Exports are affected by many factors in addition to standards and testing. There will be a time lag between the output of this activity and its impact on export.
3.	Improved awareness on ISO 22000 and WRAP standards among industrial managers.	At present, there is very little awareness among industry managers on standards such as ISO-22000 and WRAP. This affects exports, because some importers, particularly in developed countries, prefer exporters who apply these standards in their production facilities.	Number of personnel trained. Number of companies making efforts for implementing WRAP standard. Two companies certified against ISO-22000.	ISO certification data Federations of Chambers of Commerce Textile Industry Association Food Industry Association	It is assumed that relevant industry associations will take up further activities for implementation of these standards and even promoting certification to assist in export efforts.

#	A – Outcome	B – Baseline	C – Indicator	D – Sources of verification	E – Risks and assumptions
				UNIDO training reports	
4.	Facilities for training on quality management tools and techniques established.	At present there are no organized training facilities in the country for quality management tools and techniques, hence most managers are deprived of this knowledge, which affects the quality of manufactured products.	Number of faculty members of training institutions trained. Number of training courses organized by the beneficiary institutions.	UNIDO reports Records of training institutes Chambers of commerce and industry	It is assumed that trained faculty is retained in the institutes, and training courses are conducted for industry personnel, with support from industry chambers.
5.	Government made aware of seriousness of the problem of imported substandard and unsafe food product. Major deficiencies in system of import control which have been identified by Mr. Daughty the foreign expert can form the basis for planning a special project for establishment of an integrated food regulatory authority including effective system for control of imported food products.	At present there is no organized system of quality verification of imported goods, particularly those affecting health and safety.	Acceptance of plan by the government and development of a basic project document for control of food products.	Records of food regulatory authority UNIDO proposal to establish/streng then quality monitoring agency	There is a risk of compliance check mechanism getting corrupted defeating the purpose of this activity.
6.	Availability of low cost management system certification. Improved credibility of	At present there is no national certification body. Companies seeking certification have to approach foreign	Number of certificates issued by the national certification body.	ISO certification data for Bangladesh.	It is assumed that the national management system certification

#	A – Outcome	B – Baseline	C – Indicator	D – Sources of verification	E – Risks and assumptions
	management system certification activity of BSTI	certification bodies and pay high certification fees. Also, there is little control on foreign certification bodies operating in the country to prevent malpractices and ensure quality of certification.			service will be marketed well, highlighting its benefits for the industry, and also promoted by the Government for public sector units to give it a good start.

Bhutan

#	A – Outcome	B – Baseline	C – Indicator	D – Sources of verification	E – Risks and assumptions
1.	Easy availability of standards and regulations of exportable products.	At present there is no organized system by which potential exporters can access specifications and regulatory requirements of products, which can be exported to different countries. Due to this their export consignments are rejected for non-compliance with certain requirements.	Number of standards and regulation documents supplied to industry users and exporters. Increase in exports. Reduced incidence of complaints and rejection by foreign importers.	SQCA records Chambers of commerce and industry	It is assumed that a campaign will be organized by SQCA to make industry aware of the easy availability of standards and regulations and the benefits of their application. Exports are affected by many factors in addition to standards. There will be time lag between the output of the activity and its impact on exports.
2.	Improved awareness of ISO 22000 and SA-8000 standards among industrial managers.	At present, there is very little awareness of standards such as ISO-22000 and SA-8000 among industry managers. This affects exports, because some importers, particularly in developed countries, prefer exporters who apply these standards in their production facilities.	Number of personnel trained. Two companies certified against ISO-22000. Two companies certified against HACCP.	ISO certification data Federations of Chambers of Commerce, Food Industry Association UNIDO training reports	It is assumed that relevant industry associations will take up further activities for implementation of these standards and even promoting certification to assist export efforts.

#	A – Outcome	B – Baseline	C – Indicator	D – Sources of verification	E – Risks and assumptions
3.	Improved credibility of the test results of BAFRA food laboratory among domestic industry, resulting in more testing and improvement in product quality Acceptance of test results by foreign buyers there by avoiding expensive testing of samples from exported food products in foreign labs and making Bhutanese products more competitive.	At present results of BAFRA laboratories are not fully accepted by foreign importers. As such products for exports are getting tested in expensive private accredited labs in foreign test labs, adding to cost which affects competitiveness Very few products for domestic market are sent for testing in BAFRA because of the poor credibility of test results.	Test laboratory accredited. Number of samples of products for domestic sales tested. Number of samples of export products tested and consequent increase in exports.	ILAC data BAFRA laboratory records Chambers of commerce and industry Export data	It is assumed that the services of the accredited food testing laboratory will be properly marketed. Assuring regular calibration of test equipment through calibration facilities in Bhutan or neighbouring countries can pose significant risk.
4.	Consumers assured of getting proper quantity of goods purchased by them Exporters will be able to demonstrate the accuracy of contents in the packages of processed food exported to other countries.	At present there are no facilities for verification of weights & measures as per international norms. No facilities exist for calibration of industrial instruments used by governmental organizations and trade.	Legal metrology laboratory accredited Number of weights & measures verified. Mobile legal metrology lab in operation.	ILAC data Metrology laboratory of SQCA and mobile metrology vehicle Weights & Measures Department of Ministry of Industry.	It is assumed that Bhutan weights & measures Act will be passed to give legal backing to this activity. It is assumed that adequate personnel will be deployed for verification of weights & measures in the field.
5.	Government made aware of seriousness of the problem of imported substandard and	At present there is no organized system of quality verification of imported goods, particularly	Acceptance of plan by the government and development of a basic	Records of food regulatory authority	There is a risk of compliance check mechanism getting

#	A – Outcome	B – Baseline	C – Indicator	D – Sources of verification	E – Risks and assumptions
	unsafe food product. Major deficiencies in system of import control which have been identified by Mr. Daughty the foreign expert can form the basis for planning a special project for establishment of an integrated food regulatory authority including effective system for control of imported food products.	those affecting health and safety.	project document for control of food products	UNIDO proposal to establish/strengthen quality monitoring agency	corrupted defeating the very purpose of this activity.

Maldives

	A – Outcome	B – Baseline	C – Indicator	D – Sources of verification	E – Risks and assumptions
1.	Easy availability of standards and regulations of exportable products.	At present there is no organized system by which potential exporters can access specifications and regulatory requirements of products, which can be exported to different countries. Due to this sometimes export consignments are rejected for non-compliance with certain requirements.	Number of standards and regulation documents supplied to industry users and exporters. Reduced incidence of complaints and rejection by foreign importers. Increase in exports	MSMU Records Records of Chambers of commerce and Industry	It is assumed that a campaign will be organized by MSMC to make industry aware of the easy availability of standards and regulations and the benefits of their application. Exports are affected by many factors in addition to standards. There will be a time lag between the output of the activity and its impact on exports.
2.	Improved awareness of ISO 22000 and OHSAS-18000 standards among industrial managers.	At present, there is very little awareness of standards such as ISO-22000 and OHSAS-18000 among industry managers. This affects exports, because some importers particularly in developed countries prefer exporters who apply these standards in their production facilities.	Number of personnel trained. Seven companies certified against ISO 22000 Male airport fish export handling facility certified against HACCP. Number of companies making efforts for implementing OHSAS 18000 standards.	ISO certification data Federations of Chambers of Commerce Food Industry Association	It is assumed that relevant industry associations will take up further activities for implementation of these standards and even promoting certification to assist in export efforts.

3.	Improved credibility of the test results of Maldives Food and Drug Authority (MFDA) Food Laboratory among domestic industry, resulting in more testing and improvement in product quality. Acceptance of test results by foreign buyers resulting in reduction of compliants from the buyers and increase in exports.	At present scope of Maldives Food and Drug Authority (MFDA) laboratories accreditation are limited. As such products for exports are getting tested in expensive private accredited labs in foreign test labs, adding to cost which affects competitiveness.	Test laboratory accredited Number of samples of products for domestic sales tested. Number of samples of export products tested and consequent increase in exports.	ILAC data Maldives Food and Drug Authority Laboratory records Chambers of commerce and industry Export data	It is assumed that the services of the accredited food test laboratory will be properly marketed. Assuring regular calibration of test equipment through calibration facilities in neighbouring countries can pose a significant risk. Exports are affected by many factors in addition to standards. There will be time lag between the output of the activity and its impact on exports.
4.	Improved access of Maldives population to legal metrology services. Consumers assured of getting proper quantity of goods purchased by them. The exporters can demonstrate the quantity of contents on the exported packages.	At present there are no facilities for verification of weights & measures as per international norms. No facilities exist for calibration of industrial instruments used by governmental organization and trade.	Legal metrology laboratory accredited. Number of weights & measures verified.	ILAC data Records of Metrology laboratory of MSMU. Field verification records of weights & measures.	It is assumed that Maldives weights & measures Act will be passed to give legal backing to this activity. It is assumed that adequate personnel will be deployed for verification of weights & measures.

5.	Government made aware of seriousness of the problem of imported substandard and unsafe food product. Major deficiencies in system of import control which have been identified by Mr. Daughty the foreign expert can form the basis for planning a special project for establishment of an integrated food regulatory authority including effective system for control of imported food products.	At present there is no organized system of quality verification of imported goods, particularly those affecting health and safety.	Acceptance of plan by the government and development of a basic project document for control of food products.	Records of food regulatory authority. UNIDO proposal to establish/strengthe n quality monitoring agency	There is a risk of Compliance check mechanism getting corrupted defeating the purpose of this activity.
6.	Seven metrology cells established and metrology services decentralized and available to general population Access to metrology services facilitated for far off islands.	At present the only existing metrology laboratory is located in the capital island. As the Maldives is an archipelago with over 99 % covered by the ocean, logistics for cost efficient metrology services are not in place.	Seven legal metrology cells established Number of weights & measures verified	Records of Metrology cells Field verification records of weights & measures.	It is assumed that adequate personnel will be deployed for verification of weights & measures in the field Government of Maldives committed to bear the costs associated with staffing, physical infrastructure and running costs following the project intervention...

Nepal

	A – Outcome	B – Baseline	C – Indicator	D – Sources of verification	E – Risks and assumptions
1.	NBSM product certification Mark perceived as a value addition for the products by Bangladesh Industry Establishment of certification system as per ISO Guide 65 will enable NBSM to expand the scope of the accreditation to products such as cement and other products exported to India and other countries. After which it can negotiate agreement with these countries to accept NBSM marked products on reciprocal basis.	At present the NBSM Mark is not recognized in other countries. A number of products covered by the NBSM Mark cannot be exported to India unless the manufacturers in Nepal get the ISI Mark license from India, involving additional cost and time.	Accreditation of NBSM product certification scheme for a few food items. Number of additional product certification licenses.	IAF data NBSM record of licensees Export data	It is assumed that: NBSM will establish effective market surveillance mechanism to improve credibility of NBSM Mark The product certification mark will be properly marketed by highlighting its benefits. Product certification activity is prone to being corrupted which is a risk in achieving desired outcomes.
2.	Improved credibility of the test results of DFTQC food laboratory among domestic industry,	At present Results of DFTQC laboratory are not accepted by foreign importers. As such products for exports are getting testing in expensive private	Test laboratory accredited. Number of samples of products for domestic sales tested.	ILAC data DFTQC laboratory records Chambers of commerce and	It is assumed that the services of the accredited food test laboratory will be properly marketed.

	resulting in more testing and improvement in product quality Acceptance of test results by foreign buyers. There by meeting strong demand from Pashmina Industry for low cost testing of Pashmina product which will make their product more completive and help in increase of exports.	accredited labs in foreign test labs, adding to cost which affects competitiveness. Very few products for domestic market are sent for testing to DFTQC because of poor credibility of test results.	Number of samples of export products tested and consequent increase in exports.	industry Export data	Assuring regular calibration of test equipment through calibration facilities in Nepal for neighbouring countries can pose a significant risk.
3.	Improved awareness of ISO-22000, SA-8000 and OHSAS-18000 among industry managers.	At present, there is very little awareness of standards, such as ISO-22000, SA-8000 and OHSAS, among industry managers. This affects exports, because some importers, particularly in developed countries, prefer exporters who apply these standards in their production facilities.	Number of personnel trained. Number of companies making efforts for implementing SA 8000 and OHSAS 18000 standards Two companies certified against ISO-22000.	ISO certification data. Federations of Chambers of Commerce ILO reports on occupational health UNIDO reports	It is assumed that relevant industry associations will take up further activities for implementation of these standards and even promoting certification to assist in export efforts.
4.	Acceptance of test certificates of NBSM textile laboratory by foreign buyers. Low cost testing would lead to improvement of quality of textiles	At present foreign importers do not accept test reports of NBSM laboratories. As such, products for export are tested in expensive private accredited labs in Nepal or foreign test labs, adding to costs, which affect competitiveness.	Textile lab accredited Number of samples of export products tested and consequent increase in exports Number of samples of products for domestic	ILAC data. NBSM records Chambers of commerce and industry. Pashmina Industries Association.	It is assumed that the services of the accredited textile test laboratory will be properly marketed Assuring regular calibration of test

	and increase in exports.	Very few products for domestic market are sent for testing in Nepal because of poor credibility of test results.	sales tested. Business partnership agreement between NBSM and Pashmina Industries Association		equipment through calibration facilities in Nepal or neighbouring countries can pose a significant risk.
5.	Government made aware of seriousness of the problem of imported substandard and unsafe food product. Major deficiencies in system of import control which have been identified by Mr. Daughty the foreign expert can form the basis for planning a special project for establishment of an integrated food regulatory authority including effective system for control of imported food products.	At present there is no organized system of quality verification of imported goods, particularly those affecting health and safety.	Acceptance of plan by the government and development of a basic project document for control of food products.	Records of food regulatory authority.	There is a risk of compliance check mechanism getting corrupted defeating the purpose of this activity.
6.	Availability of low cost management system certification Improved credibility of management system certification activity at	At present there is no national certification body. Companies seeking certification have to approach foreign certification bodies and pay high certification fees. Also, there is little control on foreign certification bodies	NBS management systems certification accredited Number of certificates issued by the national certification body.	ISO certification data for Nepal.	It is assumed that the national management system certification service will be marketed, fully highlighting its benefits for industry,

	NBSM	operating in the country to prevent malpractices and ensure quality of certification.			and will also be promoted by the government for public sector units to give it a good start.

ANNEX 4 TERMS OF REFERENCE INDEPENDENT EVALUATION

Terms of Reference

Independent Final Evaluation of the UNIDO Project:

TE/RAS/07/001

"Market Access and Trade Facilitation Support for South Asian LDCs, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ) – Phase II"

I. BACKGROUND

The UNIDO/NORAD SMTQ programme in SAARC countries has been structured into phase 1 (2003 – 2007) and phase 2 (2007 – 2012). The present evaluation concerns phase 2, which was designed on the basis of an independent evaluation of phase 1 carried out in 2007. The present evaluation will also capture the combined outcomes and impacts from phase 1 and 2.

The programme aims to facilitate the industrial development and export capabilities and spur the economic growth in the four SAARC countries Bangladesh, Bhutan, Nepal and Maldives by reducing technical barriers to trade through the strengthening of institutional structures and national capacities in standards, metrology, testing, quality and conformity assessment. Under phase 2 the export oriented objective of the programme has been extended towards developing a plan for protecting domestic society against substandard and hazardous product imports.

The approach in the four target countries varies taking into account the diversity of socioeconomic conditions and specific SMTQ needs.

The project document describes the expected outcomes as follows:

i. Product certification marks accepted internationally.
ii. Technical constraints on exports from beneficiary countries reduced.
iii. Awareness created of quality management techniques among industrial managers of beneficiary countries.
iv. Plan developed to strengthen import quality control procedures.
v. Improved awareness of ISO 22000, WRAP, SA 8000 and OHSAS 18000 standards among industrial managers.
vi. Cost reduction of the quality management system certificate and an increase in the number of companies with QMS certificates.

The project has been subject to a mid-term evaluation in 2009. The findings and recommendations of this mid-term evaluation shall be given due consideration under the present final evaluation. Moreover, the present evaluation will validate the findings and recommendations of the recent thematic evaluation of all UNIDO projects in the area of SMTQ.

II. BUDGET INFORMATION

Project No.	Total Allotment in USD	Total Expenditure in USD	Implementation (%)
TERAS07001 - Common Budget	380.025,75	313.659,32	82,54%
TERAS07A01 - Bangladesh	520.212,53	460.810,04	88,58%
TERAS07B01 - Bhutan	674.529,68	510.323,05	75,66%
TERAS07C01 - Maldives	574.873,30	477.935,73	83,14%
TERAS07D01 - Nepal	602.170,17	509.750,48	84,65%
TOTAL	**2.751.811,43**	**2.272.478,62**	**82,58%**

Source and date of information: Project records (24 February 2012)

III. PURPOSE OF THE EVALUATION

At the moment of the final evaluation the overall duration of the programme (including phase 1) will be almost 7 years. This enables a wider evaluation perspective looking at the emergence of accumulated outcomes and impacts from both phases.

This final evaluation serves the following purposes:

- Conduct the evaluation of phase 2 (on the basis of DAC criteria);
- Assess accumulated outcomes and impacts from both phases;
- Assess the implementation of recommendations from the mid-term evaluation of phase 2;
- Assess the implementation of recommendations from the Thematic Evaluation of UNIDO SMTQ projects;
- Make recommendations for a potential third phase of the programme.

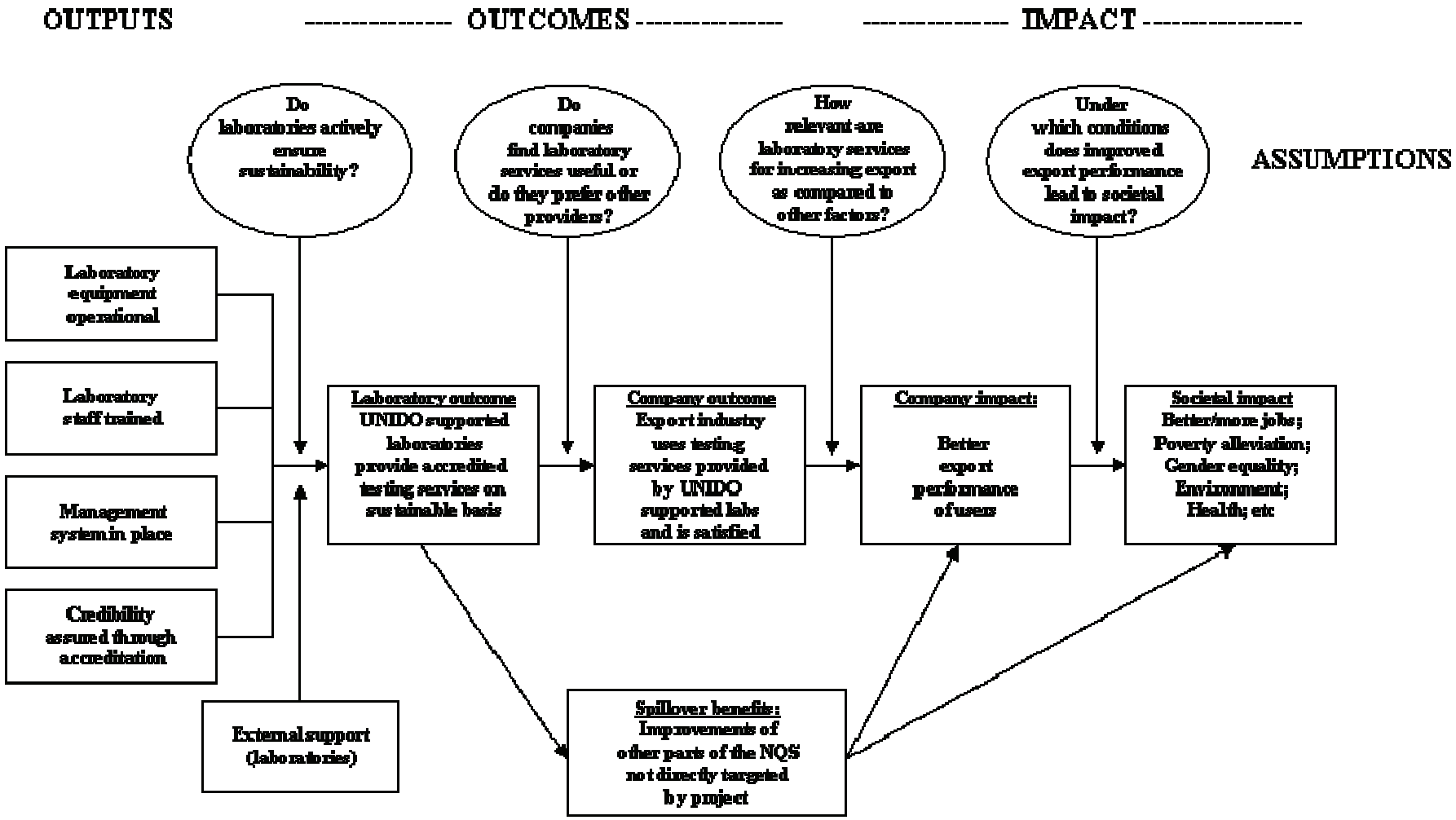
IV. METHODOLOGY

The evaluation will be conducted in compliance with UNIDO's Evaluation Policy and Technical Cooperation Guidelines and attempts to determine, as systematically and objectively as possible, the relevance, efficiency, effectiveness impact and sustainability of the project. The evaluation will:

- Assess the achieved outputs, outcomes and impacts of phase 2 against the planning in the project document;
- Examine the "intervention theories" from outputs to expected outcomes and impact taking into account (explicit and implicit) assumptions on external factors and assess the likelihood to achieve these outcomes and impact in the light of the "Key Success Factors" identified under the thematic SMTQ evaluation and using, as appropriate the stylized intervention logic shown in Diagram 1.

The evaluation will be carried out through analyses of various sources of information including desk analysis, survey data, interviews with stakeholders such as Government counterparts, staff members of the supported organizations, UNIDO staff members and beneficiary companies and through the cross-validation of data. While maintaining independence, the evaluation will be carried out based on a participatory approach, which seeks the views and assessments of all parties.

Diagram 1: Stylized Intervention Logic



The evaluation will apply the DAC evaluation criteria as follows:

Relevance
The extent to which:

(i) The project is in line with the priorities and policies of the respective Governments and the institutional context;
(ii) The services of the counterpart organizations are perceived as relevant by the target beneficiaries of the project in the public and private sector.

Efficiency of implementation
The extent to which:

(i) UNIDO and Government/counterpart inputs have been provided as planned and were adequate to meet requirements.
(ii) The quality of UNIDO inputs and services was as planned and timely
(iii) The least costly resources and processes were used in order to achieve the objectives
(iv) There was coordination with other projects of UNIDO and of other Agencies and possible synergy effects

Effectiveness and institutional sustainability
The extent to which:

(i) The expected outcomes were achieved or are likely to be achieved
(ii) The sustainability criteria in annex were met (for laboratories)
(iii) The sustainability plans are accurate, realistic and implemented

Impact

(i) Establishing the "intervention theories" from outputs to expected impacts at company level and beyond;
(ii) Identification of the assumptions on external factors and "impact drivers" that are considered necessary to achieve impact;
(iii) Assessment of the plausibility of the intervention theories;

Project coordination and management
The extent to which:

(i) The national management and overall coordination mechanisms have been efficient and effective.
(ii) The UNIDO HQ based management, coordination, quality control and technical inputs have been efficient and effective.
(iii) Monitoring and self-evaluation were carried out effectively, based on measurable indicators.
(iv) Synergy benefits can be found in relation to other UNIDO projects in the same countries and in relation to activities of other donors.

In addition to the DAC criteria, the evaluation will assess

- whether and to what extent the programme has implemented the recommendations of the Thematic Evaluation of UNIDO SMTQ projects;

- whether and to what extent the recommendations of the Mid-term Evaluation listed below were appropriate, implementable and implemented.

General recommendations

- Given the ambition of outcomes of this project (mainly accreditation of testing scopes to ISO 17025) and the length of time that this is likely to take, it is recommended that the project implementation period be extended by at least 6-12 months to allow all the activities to take place.
- The evaluation team notes that there is a need for further support in the area of substandard and hazardous product imports in all SAARC countries beyond the scope of the current project Phase and recommends that UNIDO/NORAD consider funding/supporting this work.
- Where UNIDO has supported plans to control substandard and hazardous imports it is recommended that these are adopted by the relevant authorities.
- The log frame of the project should be reconsidered to facilitate future evaluation. Specifically, the OVI's, sources of verification, risks and assumptions need to be amended. The current assumptions and risks should be critically reviewed and adjusted to make them reasonable or removed. Some project outputs/outcomes should be adjusted to make them realistically attainable within the remaining project period.
- It is recommended that the project consider assisting at least some of those trainees who passed the lead auditor training course to become full lead auditors by undertaking five audits if funds are available in the remaining project period.
- It is recommended that institutions such as BSTI and NBSM should demonstrate their ability to apply ISO 9000 themselves as a condition for receiving support to become management system certifiers.
- Adopt a more evidence based and management-oriented format of sustainability plans and accompany the development and implementation of these plans more proactively by inputs from the CTA and/or international experts
- The project would benefit from a CTA with a more pro-active role. It is recommended that UNIDO redefines and clarifies the terms of reference and that UNIDO and the donor should consider whether there is scope for shifting from the concept of a 'honorary' CTA to a more hands-on management approach.

Bangladesh:

- To improve ownership it is recommended that the project hold more frequent Steering Committee meetings and that some private sector involvement should be encouraged. Combining Steering Committee meetings with the governance activities of BQSP and its follow-up project BEST should be considered.
- UNIDO should consider using the CTA of the EU funded project as a coordinator of all UNIDO SMTQ activities in the country;
- Fundamental changes in the quality laws of Bangladesh will be needed to reach accreditation of the product certification scheme. The respective outcome should be adjusted to reflect a more realistic output such as identifying areas for reform and initiating a programme of change that will create the conditions for accreditation in the future.

- BSTI need institutional change plans to guide their senior management through the process of reform and this should form part of future support proposals.
- UNIDO and NORAD should support the on-going efforts of the EC to promote reform in BSTI.
- The portfolio of testing equipment at BSTI is now substantial and it is recommended that the institution develop a maintenance and replacement plan for all equipment supplied by the project.
- Despite every effort by UNIDO to ensure that the appropriate individuals attend training courses and study tours, the evaluation team still found cases of BSTI sending individuals on training courses where they are not appropriately placed within the structure of the organisation to apply the learning (notably in ISO 22000 auditor training). It is recommended that more care needs to be taken to ensure that those receiving training are those that will apply it.

Bhutan:

- In the light of the fluid macro-economic policy situation in Bhutan, the project objectives should be reconsidered once the new national economic policy is agreed.
- The proposed study visits from SQCA metrology and BAFRA staff should be replaced with in-service placements in suitable working laboratories to gain hands-on experience. This recommendation responds to the desire by laboratory staff to know what their jobs might entail on a day to day basis.
- SQCA should develop a communication plan to make the public aware of the services that it provides.
- The project should consider discontinuing the quality systems awareness training component and using the funds released for other activities.

Maldives:

- The Government might want to consider a two-level structure of the Steering Committee (strategic level and technical level) and include the Ministry of Health with a view to better covering MFDA and future widening of the project scope towards food safety; the Government commitment not to expand public administration is laudable but understaffing of SMTQ bodies is a major bottleneck and should be addressed;
- Metrology: Provide metrology training only once qualified metrology officers have been appointed; clarify with MED its priorities in the area of Metrology and Weights and Measures before purchasing further metrology equipment; given the political priorities of the new Government it might be an option to reorient the current project planning from international accreditation of the national metrology laboratory towards assisting the Government with the development of a functional and decentralized Weights & Measures service; consider assisting the Government with developing a development plan in the area of Metrology and Weights and Measures, should this be requested by the government;
- Accreditation of MFDA chemical laboratory: Coordinate the support more closely with WHO; consider using the same accreditation body (Thailand) for the

chemical laboratory that has been introduced by WHO for the accreditation of the microbiological laboratory;

- QMS: Consider QMS awareness building activities, in particular launching the National Quality Award; ISO 22000: Carry out a pre-audit of the 8 companies who applied for ISO 22000, decide which companies are most advanced and select those two companies that should benefit from subsidized ISO 22000 certification under the UNIDO project; select the ISO 22000 certification body bearing in mind the focus of the exercise on fish processing; allow for a better integration of local consultants into QMS promotion (twinning of international and local consultants)
- OHSAS: Implement the OHSAS training as suggested by MED in cooperation with the trade associations of the fish, tourism and construction industries.

Nepal:

- The national project coordinator should be given an official status with clear management prerogatives.
- Product certification scheme: A new activity plan with milestones should be developed and agreed upon; NBSM should implement the Quality Manual in one pilot industry and set up the necessary committees; a firm deadline should be fixed by when NBSM will be ready to receive international assistance for an internal audit (pre-audit) of the product certification scheme.
- Textile laboratory: NBSM should ensure preconditions for sustainable accreditation (ensure reliable electricity supply; appoint textile engineer; adopt business model similar to DFTQC that allows withholding part of the income at NBSM).
- Textile laboratory: Develop the textile laboratory with a clear focus on industry needs and “lead export products” and in close partnership with the respective industry (pashmina may be such a product).
- Food laboratory: There is an urgent need for good housekeeping because the newly delivered laboratory equipment may be at risk due to construction works.
- Food laboratory: DFTQC and UNIDO should develop the food laboratory with a clear focus on industry needs and “lead export products” such as honey, tea, medicinal herbs and other food products for export.
- QMS certification: NBSM and UNIDO should carry out a survey of the QMS certification market in Nepal, explore client preferences and priorities and develop the future QMS certification function of NBSM without crowding out private providers of QMS support and certification services.
- ISO 22000: DFTQC and UNIDO should allow for a better integration of local consultants into QMS promotion (twinning of international and local consultants) when implementing ISO 22000 at the two pilot companies and accompany the process by a publicity and awareness campaign.
- Quality training: Given the limited ownership for this activity UNIDO and the donor should consider using these funds for supporting private QMS service providers (see 23 and 24).
- OHSAS: In preparation of the OHSAS 18000 seminar NBSM and UNIDO should identify those government institutions, NGOs, companies and consultants who

have been involved in OHSAS 18000 related issues in the past and organize the OHSAS 18000 seminar in close cooperation with them and with ILO.

V. EVALUATION TEAM

The evaluation will be conducted by an independent international evaluator who has not been involved in the design and/or implementation of the project.

The UNIDO Evaluation Group will be responsible for the quality control of the evaluation process and of the report. The UNIDO Regional Office for South Asia based in New Delhi will provide support to the evaluation team.

VI. TIMING

The evaluation is scheduled to take place in the period between10 March to 30 May 2012. A briefing session by the project officer will take place in Vienna by mid-March.

The final report will be prepared within six weeks of completion of the field mission and will be submitted to UNIDO, NORAD and the respective Governments.

VII. REPORTING

At the end of his stay in each country, the evaluator will present his preliminary findings to the respective Governments, record their feed-back and take it into account. At the end of the mission, the evaluator will present his preliminary findings to NORAD and UNIDO representatives at a meeting at UNIDO HQ and take into account their feed-back. On this basis, the evaluator will prepare a draft report and submit it to the project manager, the project counterparts and the UNIDO Evaluation Group for comments. On the basis of all comments received the evaluator will prepare the final report. The reporting language will be English. The final report will be delivered fully edited and in the standard format of UNIDO evaluation reports.

Quality Assessment of the Evaluation Report:

All UNIDO evaluations are subject to quality assessments by UNIDO Evaluation Group. These apply evaluation quality assessment criteria and are used as a tool for providing structured feedback. The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality (Annex 1).

Annex 1

Report quality criteria	UNIDO Evaluation Group Assessment notes	Rating
Did the report present an assessment of relevant outcomes and achievement of project objectives?		
Were the report consistent and the evidence complete and convincing?		
Did the report present a sound assessment of sustainability of outcomes or did it explain why this is not (yet) possible?		
Did the evidence presented support the lessons and recommendations?		
Did the report include the actual project costs (total and per activity)?		
Quality of the lessons: Were lessons readily applicable in other contexts? Did they suggest prescriptive action?		
Quality of the recommendations: Did recommendations specify the actions necessary to correct existing conditions or improve operations (‘who?’ ‘what?’ ‘where?’ ‘when?)’. Can they be implemented?		
Was the report well written? (Clear language and correct grammar)		
Were all evaluation aspects specified in the TOR adequately addressed?		
Was the report delivered in a timely manner?		

Checklist on evaluation report quality

Rating system for quality of evaluation reports
A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1, and unable to assess = 0.

Printed in Austria
ODG/EVA/12/R.5—December 2012 - [100]

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