Independent evaluation UNIDO PROJECT TF/RAS/03/001

Market access and trade facilitation support for South Asian LDCs, through strengthening institutional and national capacities related to standards, metrology, testing and quality (SMTQ)



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The views and opinions of the team do not necessarily reflect the views of the Governments of Bangladesh, Bhutan, Maldives, Nepal, and of UNIDO.

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Several stakeholders in the beneficiary organizations requested that we as evaluators convey their appreciation for being given the opportunity to take part in the project.

Abbreviations

| ADB | Asian Development Bank |
|---------|--|
| BAB | Bangladesh Accreditation Board |
| BAFRA | Bhutan Agriculture and Food Regulatory Authority |
| BCCI | Bhutan Chamber of Commerce and industry |
| BDS | Bangladesh Standards |
| BEA | Bhutan Electricity Authority |
| BIMSTEC | Bangladesh, India, Myanmar, Sri Lanka and Thailand Economic cooperation |
| BIS | Bureau of Indian Standards |
| BQSP | Bangladesh Quality Support Programme |
| BRC | Global food standard, originally developed by British retailers |
| BSI | British Standards Institution |
| BSTI | Bangladesh Standards and Testing Institution |
| BTS | Bhutan Standards |
| CA | Competent Authority |
| CIF | Cost, Insurance, Freight (trade term) |
| CTA | Chief Technical Adviser |
| EEZ | Exclusive Economic Zone |
| EMS | Environmental Management System |
| EPZ | Export Processing Zone |
| ESPEC | EU-SAARC Programme of Economic Cooperation |
| EU | European Union |
| FBCCI | Federation of Bangladesh Chambers of Commerce and Industry |
| FNCCI | Federation of Nepalese Chambers of Commerce and Industry |
| FOB | Free On Board (trade term) |
| DFTQC | Department of Food Technology and Quality Control, Nepal |
| GDP | Gross Domestic Product |
| GHP | Good Hygienic Practice |
| GMP | Good Manufacturing Practice |

| HACCP | Hazard Analysis and Critical Control Point |
|--------|---|
| IAF | International Accreditation Forum |
| IEC | International Electro-technical Commission |
| IFPD | International Trade Policy Division, Ministry for Economic Development and Trade, Maldives |
| IS | Indian Standards |
| ISO | International Organization for Standardization |
| ITC | International Trading Centre |
| JICA | Japan International Cooperation Agency |
| MFA | Multi Fibre Agreement |
| MFDA | Maldives Food and Drug Authority |
| MOU | Memorandum of Understanding |
| MSMC | Maldives Standards & Metrology Center |
| MTI | Ministry of Trade and Industry |
| NBSM | Nepal Bureau of Standards and Metrology |
| NGO | Non-Governmental Organization |
| OIML | International Organisation Of Legal Metrology |
| PD | Project Document |
| PPP | Purchasing Power Parity |
| QMS | Quality Management Systems |
| SAARC | South Asian Association for Regional Cooperation |
| SAFTA | South Asian Free Trade Area |
| SIRIM | Standards and Industrial Research Institute of Malaysia |
| SMC | Standards and Metrology Centre |
| SME | Small and Medium Enterprises |
| SMTQ | Standardisation, metrology, testing and quality |
| SPS | Sanitary and Phytosanitary Measures |
| SQCA | Standards and Quality Control Authority, Bhutan |
| SQM | SAARC Standing Group on Standards, Quality Control and Measurement |
| TBT | Technical Barriers to Trade |
| UNCTAD | United Nations Conference on Trade and Development |

| UNDP | United Nations Development Program |
|-------|--|
| UNIDO | United Nations Industrial Development Organization |
| USD | American dollars |
| WTO | World Trade Organization |

Glossary of terms

| Term | Definition |
|-----------------|---|
| Effect | Intended or unintended change due directly or indirectly to an intervention. |
| Effectiveness | The extent to which the development objectives of an intervention were or are expected to be achieved. |
| Efficiency | A measure of how economically inputs (through activities) are converted into outputs. |
| Impact | Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention. |
| Indicator | Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention. |
| Intervention | An external action to assist a national effort to achieve specific development goals. |
| Lessons learned | Generalizations based on evaluation experiences that abstract from specific to broader circumstances. |
| Outcomes | The achieved or likely effects of an intervention's outputs. |
| Outputs | The products in terms of physical and human capacities that result from an intervention. |
| Relevance | The extent to which the objectives of an intervention are consistent with the requirements of the end-users, government and donor's policies. |
| Risks | Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives. |
| Sustainability | The continuation of benefits from an intervention, after the development assistance has been completed |
| Target groups | The specific individuals or organizations for whose benefit an intervention is undertaken. |

Executive summary

The 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) was designed as a regional project for the four countries Bangladesh, Bhutan, Maldives and Nepal.

The development objective for the project is described as follows:

Facilitate industrial development and export capabilities (and consequently spurring economic growth and employment opportunities) of the assisted countries by reducing technical barriers to trade through the strengthening of standards, metrology, testing, quality and conformity assessment institutional structures and national capacities.

Phase Ia and Ib is focussed on mapping of the national SMTQ infrastructures, training, consultancy and planning of further developments. Stakeholders in industry receive training, consultancy and certification support for implementation of management systems in their organisations. Phase II will implement the plans developed in Phase Ia and Ib, as well as continue the developments started, in order to achieve sustainable results.

Phase Ia of the project is funded by the Government of India with USD 200,000. Phase Ib is financed by the Government of Norway. UNIDO's budget for this phase is USD 933,000 plus 13 % project support cost, total USD 1,054,290. The appropriation has later been increased to account for interest and currency fluctuations. Per December 2006, the total budget is USD 1,027,191 plus 13 % project support cost, in total USD 1,160,725.

The evaluation has been carried out in January to April 2007. UNIDO's evaluation department is responsible for the evaluation. The contact person is Mr. Peter Loewe. The Terms of Reference for the evaluation is included in the report as Annex 1

Mr. Ivar Foss of Ivar Foss Quality Management AS, Oslo, Norway, was appointed as International Evaluation Consultant for this evaluation. In each of the four countries, one National Evaluation Consultant was appointed. They were: Dr. Md. Imtiaz Hossain, Bangladesh. Ms. Rosy Nirola, Bhutan, Ms. Shafeenaz Sattar, Maldives and Mr. Poorna Manandhar, Nepal. The fieldwork consisted of two missions, to Bangladesh and Nepal from 5th – 16th February 2007 and to Maldives and Bhutan from 25th February – 09th March 2007.

Regional and Country Context

There are enormous differences between the member counties of SAARC. This relate to size, culture, religion, development level and other factors. India is the dominating power of the region. In addition, the political relation between certain countries is sensitive. All these factors complicate regional cooperation.

Diverse standards, and methods of assessing conformity to them, form major technical barriers to trade in the SAARC countries. A Standing Group on Standards, Quality Control and Measurement (SQM) was set up by the SAARC Commerce Ministers in 1998. The results so far are very limited.

UNIDO have taken several initiatives to foster regional cooperation within SAARC, but stakeholder interest is small. The EU proposed a regional programme in 2006 which as one of the components include standards, testing and calibration, and establishing a SAARC Quality Foundation.

In **Bangladesh**, a country with 147 million people, 74 % of the export is woven garments and knitwear. There is a range of industry and export promotion measures, including the establishment of Export Processing Zones.

In January 2007 there was so much unrest in the country that the President was forced to declare a state of emergency. A new Caretaker government was appointed and identified corruption as the biggest problem of the country – and announced measures against it. Since then there has been a tremendous improvement in the law and order situation.

Bangladesh has got a well-developed national standards institution, Bangladesh Standards and Testing Institution (BSTI), which was established in 1956 and has developed about 2000 national standards. BSTI operates a WTO TBT enquiry point which, however, is still very weak. Bangladesh does not have a credible calibration system with international traceability, and the calibration laboratories are not accredited. There is an urgent need for upgrading the legal, industrial and scientific metrology laboratories. Bangladesh has a number of product testing laboratories, and product certification is one of the main functions of BSTI. Bangladesh is in the process of establishing a national accreditation body, Bangladesh Accreditation Board.

Application of management standards has increased rapidly in recent years and about 600 certificates to ISOO 9001 have been awarded. ISO 9000, ISO 14000 and HAACP were promoted in Phase Ib of this project. Bangladesh Quality Support Programme (BQSP) was initiated on the basis of Phase I of the UNIDO project. The budget is Euro 13.5 million, Euro 10 million is financed by the EU. The programme started 01.01.2006 and the planned duration is four years. UNIDO is the implementing agent for about 75 % of the programme, and ITC shares the rest.

Bhutan is a landlocked country with 0.7 million people. It has registered an average Gross Domestic Product (GDP) growth rate of around 7% during last few years. Agriculture and forestry are the major contributors. In the industrial sector, hydroelectric power is the main export. The Bhutan economy has strong formal and informal links with the Indian economy. Virtually all trade is carried out with India.

The nucleus standards body of Bhutan is Standards and Quality Control Authority (SQCA) under Ministry of Works and Human Settlement. SQCA has a civil engineering background, as their main task is to control the quality and safety of Government buildings, roads, etc. SQCA has recently been appointed as national standards body for Bhutan. The country does not have any institutionalized legal or industrial. There are no accredited test laboratories in Bhutan. Processed food is a major export product and the Bhutan Agriculture and Food Regulatory Authority (BAFRA) need to be strengthened

Republic of Maldives is an independent archipelago state consisting of approximately 1,190 low-lying coral islands grouped into 26 natural atolls, stretching over an area of 90,000 square kilometers of the Indian Ocean. The country has about 300,000 inhabitants. Real economic growth has averaged 6.6 % between 2000 and 2006, with an annual low of - 4.5 % in 2005 immediately following the tsunami, and + 18.2 % in 2006 during the subsequent reconstruction period. The domestic economy is heavily dependent on fisheries and tourism. The fisheries sector has grown in importance through significant public investment in the development of supporting infrastructure followed by divestiture and subsequent growth in landings and exports. Meanwhile, the tourism sector has grown from the initial development of two islands in 1972 to over eighty resort islands, many of which are presently of an extremely luxurious standard.

Maldives does not yet have a standards body. Maldives Standards & Metrology Center (MSMC) was established during Phase 1b of the project but is not yet manned. It is the responsibility of the International Trade Policy Division under Ministry of Economic Development and Trade. The country does not have any institutionalized legal or industrial metrology system. The major testing needs is related to food testing. The laboratories under the Maldives Food and Drug Authority (MFDA) are not yet accredited, though MFDA is the competent authority for certification of fish products to the EU market.

Nepal is a landlocked independent country with a population of 23 million. Nepal still has a highly underdeveloped economy, with agriculture accounting for 37 percent of the Gross Domestic Product and 76 percent of the employment. According to the 1990 constitution, Nepal is a constitutional monarchy with a parliamentary form of government. There have not been any parliamentary elections since 1999. King Gyanendra assumed the throne in June 2001 after the royal massacre the same year. A Maoist insurgency has been ongoing since 1996, punctuated by ceasefires. In April 2006, a second major people's movement for the restoration of democracy pressured the King to relinquish power, and on 24.04.2006, King Gyanendra reinstated the 1999 parliament that was dismissed in May 2002. Now the government is heading towards the Constitutional Assembly Election in June 2007 to build a New Nepal.

Following economic reforms, Nepal initially made good progress in the 1990s in improving macroeconomic stability and accelerating economic growth but it did not sustain. The economy started going down by later half of 1990s. Nepal has had a positive GDP growth in that decade though. Agriculture remains Nepal's principal economic activity. In the last 40 years, agriculture productivity in major grains has gone down from being the highest in South Asia to being the lowest. Manufacturing and services industry (non-agriculture) account for nearly 60 % of the GDP.

Nepal became member of WTO in April 2004. This membership has exposed Nepal to the global trading system. Similarly, regional trading arrangements are likely to help Nepal's integration with the rest of the world. Readymade garments and wool carpets are the principal export articles. Tourism is important for Nepal, but due to the insurgency tourism has stagnated.

Nepal has got a well-developed national standards institution, Nepal Bureau of Standards and Metrology (NBSM), established in 1976 but it was restructured to the present form in 1988. NSBM has adopted about 700 standards. Nepal does not have a credible calibration system with international traceability, and the calibration laboratories are not accredited. As far as product testing is concerned, there is a definite need to upgrade the textile laboratory of NBSM and the food laboratory under the Department of Food Technology and Quality Control (DFTQC). NBSM operates a product certification mark scheme, but their product certification is not accepted by other countries, including India,

DFTQC has received assistance from World Bank and JICA to build a new building for laboratories and the WTO SPS enquiry point. Furthermore, a EU project is in the pipeline. The objective of the principal component is to upgrade the infrastructure of NBSM and strengthen TBT and SPS enquiry points. UNIDO will be the implementing agency for the principal component with a budget of Euro 20 million.

Project Planning, Implementation and Outputs

The following main activities were undertaken in Phase 1a:

- Key institutions and officials were identified in each target country. A workshop was organized on WTO rules and TBT/SPS requirements.
- A comprehensive research study was carried out for analysis of industry sectors and their growth prospects and trade potential in all the four target countries.
- Status of standards and conformity assessment institutions in all the LDCs was assessed.
- Food being major area of exports in all the countries, training programs/workshops was organized on good manufacturing practices (GMP) and good hygienic practices (GHP) for the personnel of food processing companies in the beneficiary countries.
- Training and consultancy requirements for standards organizations and test laboratories were identified.
- Proposals for a SAARC Accreditation Board and SAARC Calibration Services were formulated.

Phase 1 b concentrated on the following activities:

- Reviewing and strengthening the legal framework for standards, metrology, testing and conformity assessment.
- Establish or strengthen standards institutions, including plans for their testing facilities.
- Establish or strengthen metrology institutions, including master plans for further development.
- Management systems for quality, the environment and hygiene. ISO 9000, ISO 14000 and HACCP were introduced to industry; the companies received consultancy support and obtained certification.

Assessment of Project Results

This chapter of the report contains a detailed account of the results of the evaluation, under the headings of: Relevance, Ownership, Effectiveness, Efficiency, Impact, Sustainability and Horizontal issues. Most of these headings are subdivided in the following issues:

- Three issues related to the project: Objectives, Project planning and Project management
- Seven issues related to the subject matter of the project: Legislation, Standardisation, Metrology, Laboratory testing and product certification, Accreditation, Information services and Management systems and system certification in industry

On this basis we have concluded the evaluation as follows:

- 1. The project is highly relevant not only for export facilitation, but also for protection of the domestic society against substandard and hazardous products.
- 2. The planning was schematic and results from Phase Ia were not incorporated into the plans for Phase Ib, as advised in Norad's assessment of the Project Document.
- 3. UNIDO's implementation has been efficient and has produced the planned outputs.
- 4. National needs are different and regional concord is very weak.
- 5. Outputs related to the national quality infrastructure have generally been achieved. Outcome and sustainability varies as described for each country. Important actions should be continued in Phase II in order to strengthen the impact and improve sustainability.
- 6. Management system training has produced important and sustainable outcomes and expected impacts in all countries. All pilot companies have been certified or are expected to be certified before the closing of the project.

- 7. There is a generally a high degree of project ownership, but certain exceptions (see Bhutan).
- 8. The project is likely to get high impact and very good sustainability if Phase II is realised. Phase Ib is considered sustainable for the management system interventions. Planning of laboratory developments has little or no impact unless there is follow up in Phase II, or in other projects.
- 9. Phase Ib has contributed to the justification for EU projects for Bangladesh and Nepal. Major impacts are expected from these projects. UNIDO has demonstrated a highly efficient work method in this respect.
- 10. Regional SAARC activities should not be continued. In stead, UNIDO should take part in the planned EU project ESPEC.
- 11. The new proposal to include *Educational Facilities* is highly relevant.
- 12. The proposal to promote new management system standards is highly relevant.
- 13. Gender and HIV/AIDS issues have not received attention in the project.
- 14. Other UNIDO services were not considered for Phase Ia or Ib, but should be included in phase II.

Recommendations

The evaluation team makes the following **recommendations to UNDIO**, particularly related to Phase II:

- 1. The objective of the project should be extended to protect the domestic societies against substandard and hazardous products. Include product safety legislation, including food legislation, and enforcement border control, market surveillance, product certification etc. Project funding may limit the efforts in Phase II, but the objective should nevertheless be included.
- For Phase II, describe the roles and authorities of all UNIDO representatives and other stakeholders in the implementation of the project. Emphasise the two dimensions of the project: (1) Development of the national quality infrastructure; (2) Development of quality awareness and management systems, and improvement in industry.
- 3. Review and improve the project management set-up, in particular the following elements: The role and responsibilities of stakeholders, unambiguous project descriptions including total cost, coherence between project content, costs and time frame, change management, reporting format according to the donor's needs.
- 4. Mobilise the national Steering Committees in the planning and follow-up of Phase II in order to promote focus on national needs, sustainability and ownership.

- 5. Promote consumer organisations and make them aware of quality and product safety issues. Consider membership on the Steering Committees.
- 6. Reconsider the strategy for using international consultants with regard to achieving sustainability. Promote continuity and follow-up between missions and after the end of the project, for example by employing national consultants.
- 7. Continue organisation development of the national standards bodies and other important institutions of the quality infrastructure (particularly related to food safety). Pay particular attention to the establishment of the Maldives Standards & Metrology Centre.
- 8. Further develop UNIDO's strategies on the relationship between standards and legislation. Promote voluntary standards, international standards and emphasise the *Reference to Standards principle* (see Section IV C).
- 9. Follow up on the functioning of the newly established WTO enquiry points for TBT and SPS.
- 10. For development of metrology and test laboratories, use broader integrated components comprising planning, procurement, training, management system development, accreditation, and marketing. Mobilise other donors to fund investments in hardware. Bangladesh Quality Support Programme is a good example.
- 11. Develop and describe an accreditation strategy for laboratories and certification bodies in each of the four countries, based on the conditions and requirements in each country.
- 12. Revise the training strategy to adapt to the qualifications of the participants. Make sure that participants in the Lead Auditor Training courses have the necessary competence prior to the training course.
- 13. Extend the strategy for introduction of management systems in industry to include new systems such as ISO 22000 (food quality and safety), OSHAS 18000 (occupational health and work environment), SA 8000 (social accountability) etc. Some of these standards are not legal requirements but informal market requirements. Consumers and buyers in target markets present increasingly strict requirements not only to product quality and safety, but also to work environment, social issues, etc.
- 14. Remove the sub-component *Regional Dimension* from the project plan, Phase II. Contribute to implementation and results of the EU programme (see Section II A). Reduce the number of people sent on study trips (presently 24). Divert the budgeted

amounts to support the proposed second dimension of the objective related to protection of the domestic society, see point 1 above.

- 15. Follow up the *National Pesticide Residue Monitoring Plan* and the associated testing requirements for honey export from Nepal.
- 16. Develop a broader project component for the fish harvesting industry in the Maldives in cooperation with other UNIDO branches. In addition to quality issues this industry needs support in developing the business model. A supply chain component is needed to tackle problems such as large variations in catch, cheating with licences, poor respect for agreements, poor quality consciousness but also poor reward for high quality.
- 17. Beware of the risk for corruption, for example in services such as product certification. Introduce recognised measures such as sound financial control, transparency and a supportive work environment.

We make the following recommendations to the Governments:

- 1. Include quality awareness and improvement, product safety and removal of technical barriers to trade in the national policies for industrial development, international trade and consumer protection.
- 2. Provide support, including material and financial resources, to the institutions of the quality infrastructure. Specify requirements to the institutions as conditions for support.
- 3. Institute reporting procedures to ascertain that project results are followed up and that recommendations are implemented.
- 4. Promote quality awareness programmes, quality management education, excellence awards, quality associations and other efforts for development of awareness and competence in quality management in industry and in the private sector generally.
- 5. Promote transparency and straightforward operating and financial procedures in conformity assessment services, such as testing and certification in order to fight corruption and promote good governance.
- 6. In **Bangladesh,** institute reporting procedures and other measures to ascertain that project outputs are implemented without delay and become sustainable.
- 7. In **Bangladesh**, ascertain that Bangladesh Accreditation Board becomes genuinely independent of BSTI.

- 8. In **Bhutan**, follow up on the adoption of the Standards Act and the Weight and Measures Act in Parliament. Later, follow up on the implementation of the Acts, notably the realisation of SQCA as a national standardisation body.
- 9. In **Bhutan**, the legislation for consumer protection should be adopted as soon as possible.
- 10. In **Maldives**, the Standards Act should be adopted as soon as possible.
- 11. In **Maldives**, the Maldives Standards & Metrology Centre should be provided the necessary resources for starting operation. Of particular importance is staffing at a sustainable level.
- 12. In **Nepal**, the new standardisation law should be adopted as soon as possible.
- 13. In **Nepal**, the Government should closely follow the preparations for establishing national accreditation in Nepal.
- 14. In **Nepal**, the Government should promote the establishment of the *National Pesticide Residue Monitoring Plan* and the associated testing requirements for honey export from Nepal.

We make the following **recommendations to the Donor:**

- 1. Provide funding of Phase II of the project *Market Access and Trade Facilitation Support for South Asian LDCs.* Include a broader project component for the fish harvesting industry in the Maldives.
- 2. Promote multiplication effects by donor coordination and initiatives to new projects. Use Norwegian funding as "seed money".
- 3. Pay strict attention to the project management set-up, in particular the following elements: The role and responsibilities of stakeholders, unambiguous project descriptions including total cost, coherence between project content, costs and time frame, change management, reporting format according to the donor's needs.

Lessons Learned

The evaluation team agrees to point to the following lessons learned:

1. Regional programs for the SAARC region has little merit due to major differences in size, industry structure, development stage and national sensitivity, but gives some cost-efficiency. This project in reality is four different national projects.

- 2. Consumer protection against substandard and even hazardous products is a priority need in all countries. Include this as a focused objective and plan actions related to border control, product certification and market surveillance.
- 3. Good planning, based on the specific needs of the beneficiary countries, is essential for effectiveness, impact and sustainability. Project plans must be specific to each country's needs and take stakeholder requirements into account. Good plans are also the basis for proper project management and positive relations with all stakeholders.
- 4. Project management by UNIDO and follow up by the donor(s) has improved, but there is still potential for considerable improvement. See recommendations, Section V A and C.
- 5. Donor coordination and combined financing is highly effective. UNIDO should continue to use its professional competence to convince and instil confidence to other donors in supporting these highly technical programmes.
- 6. Integrated hardware and software inputs are very effective and software is highly appreciated. For example, laboratory developments should include planning, procurement, training, management system development and accreditation, and marketing.
- 7. Support related to management systems training, consulting and certification is much in demand, gives impact and multiplier effects. New needs are developing as a consequence of developments in the target markets.
- 8. Do not restrict projects to the competence of the Trade Capacity Building Branch. Also address wider needs requiring cooperation with other UNIDO branches in order to satisfy national needs. Example: The fish harvesting industry in Maldives see Section V A.
- 9. UNIDO has developed a considerable competence in trade capacity building. This is an issue of great importance to many developing countries. UNIDO should use its competence to attract additional funding (see point 5 above) and to strengthen its efforts in other areas, notably Sub-Sahara Africa.

Introduction

A. The Project

The 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) was designed as a regional project for the four countries Bangladesh, Bhutan, Maldives and Nepal.

The project consists of several phases:

| • | Phase Ia, funded by the Government of India | USD | 200,000 |
|---|---|-----|-----------|
| • | Phase Ib, funded by the Government of Norway | USD | 933,000 |
| • | Phase II, proposed to be funded by the Government of Norway | USD | 1,500,000 |

The funding is further commented in Section III A.

In the Project Document dated 28.07.2002, the project is defined as Phase Ib. Phase Ia has a different project number. In a later version of the PD, dated 29.11.2002, Phase II is also included in the project but the content of Phase II is not described. At the time of the evaluation Phase Ib is near completion and plans for Phase II are under development. The evaluation is therefore concentrated to Phase Ib, with comments on the plans for Phase II and brief mentioning of Phase Ia.

The development objective for the project is described as follows:

Facilitate industrial development and export capabilities (and consequently spurring economic growth and employment opportunities) of the assisted countries by reducing technical barriers to trade through the strengthening of standards, metrology, testing, quality and conformity assessment institutional structures and national capacities.

Phase Ia and Ib are focussed on mapping the national SMTQ infrastructures, training, consultancy and planning of further developments. Stakeholders in industry receive training, consultancy and certification support for implementation of management systems in their organisations.

Phase II will implement the plans developed in Phase Ia and Ib, as well as continue the developments started, in order to achieve sustainable results.

The national counterparts for the project are:

| Bangladesh: | Bangladesh Standards & Testing Institution (BSTI) Director M. Liaquat Ali |
|-------------|---|
| Bhutan: | Standards and Quality Control Authority Director Karma Y. Raydi |
| Maldives | Ministry of Economic Development and Trade Deputy Director Abdulla Thawfeeq, International Trade Policy Division |
| Nepal | Nepal Bureau of Standards & Metrology Director General Shree Krishna Shrestha |
| | Arjun K Uphadya, UNIDO SAARC SMTQ Project Coordinator |

B. The Evaluation

The evaluation has been carried out in January to April 2007 on behalf of UNIDO's Evaluation Group. The contact person is Mr. Peter Loewe.

The Terms of Reference for the evaluation are included as Annex 1. The purpose of the evaluation is described as follows:

"The purpose of the SAARC Region SMTQ (TFRAS03001) project independent evaluation is to enable the Government, UNIDO and donor:

- To assess the relevance and needs orientation of the project.
- To assess the efficiency of implementation: quantity, quality, cost and timeliness of UNIDO and counterpart inputs and activities.
- To assess the outputs produced and outcomes achieved as compared to those planned and to verify prospects for development impact.
- To provide an analytical basis and recommendations for the focus and (re)design for the continuation of the programme under a Phase II.

The evaluation was conducted in compliance with UNIDO's evaluation policy.

The Terms of Reference (Annex 1) defines the scope of the evaluation as UNIDO project TF/RAS/03/001, as discussed is Section I A. The evaluation focuses on Phase Ib. Recommendations are mainly forward-looking and concentrate on Phase II.

Mr. Ivar Foss of Ivar Foss Quality Management AS, Oslo, Norway, was appointed as independent international evaluation expert and team leader under UNIDO contract of 21.01.2007. In each of the four countries, a National Evaluation Consultant was appointed by UNIDO upon proposal by the respective governments. None of the National Evaluation Consultants has been involved in project implementation. The following National Evaluation Consultants were appointed:

- Dr. Md. Imtiaz Hossain, Bangladesh
- Ms. Rosy Nirola, Bhutan

- Ms. Shafeenaz Sattar, Maldives
- Mr. Poorna Manandhar, Nepal

The meetings and field work of the evaluation was scheduled as follows:

| Purpose | Location | Dates | | |
|---------------------------------|-----------|--------------------|--|--|
| Introductory meeting with UNIDO | Vienna | 31.01.2007 | | |
| Meeting with UNIDO CTA | Delhi | 06.02.2007 | | |
| Mission to Bangladesh | Dhaka | 06.02 - 11.02.2007 | | |
| Mission to Nepal | Kathmandu | 11,02 – 16.02.2007 | | |
| Mission to Maldives | Male' | 26.02 - 02.03.2007 | | |
| Mission to Bhutan | Thimphu | 03.03 - 07.03.2007 | | |
| Debriefing with UNIDO CTA | Delhi | 08.03.2007 | | |
| Debriefing with UNIDO | Vienna | 09.03.2007 | | |
| Donor meeting | Vienna | 17.04.2007 | | |

The author of the present report is Mr Ivar Foss with contributions from the national consultants. The report is based on a study of all technical reports and progress reports of the project, altogether 55 reports, comprising about 1500 pages. Stakeholders have been interviewed in all the beneficiary country. A list of organisations visited and persons met is included in Annex B. Interviews have been conducted with project management at UNIDO HQ in Vienna and Delhi, see Annex B.

Country and regional context

A. The SAARC Region

The South Asian Association for Regional Cooperation (SAARC) was established in 1985. The member countries are Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. The SAARC Secretariat was established in Kathmandu in 1987.

SAARC's charter sets out the organization's objectives of promoting the well being of the populations of South Asia, speeding up economic growth, social progress and cultural development. In 1995 there was a shift in emphasis towards economic issues and in January 2006 the SAFTA agreement was signed to eliminate barriers to trade such as tariffs, quotas, and bloated, poorly applied and diverse customs and standards regimes. SAFTA is intended as a precursor to a Customs Union, Common Market and Economic Union.

Diverse standards, and methods of assessing conformity to them, form major technical barriers to trade in SAARC. Standing Group on Standards, Quality Control and Measurement (SQM) was set up by the SAARC Commerce Ministers in 1998. Since then it has met five times and has agreed on a regional action plan. The latest meeting was held in Kathmandu on 23.11.2006.

The establishment of a regional standards body has been recommended by the SAARC Chamber of Commerce and Industry (SCCI) since 2001. A decision to establish this body was made by SQM at the third meeting, which also agreed on a number of other matters of cooperation. However, little concrete action has been taken to implement the plan so far, predominantly due to a lack of technical expertise and financial resources, particularly in terms of financing attendance at regional meetings.

There are enormous differences between the member counties of SAARC. These relate to size, culture, religion, development level and other factors. India is the dominating power of the region. In addition, the political relation between certain countries is sensitive. All these factors complicate regional cooperation.

Table 1 on the next page indicate some key figures for the four countries included in the UNIDO project. The differences are illustrated by the population size that ranges from 147 million in Bangladesh to 0.3 million in the Maldives.

In spite of the problems, there are several attempts to foster regional cooperation within SAARC. UNIDO, in meetings with SQM and in the present project, have taken initiatives, for example to

Table 1

Key data for the SAARC LDC countries

| Country | Inhabitants million | Area km2 | GDP PPP per capita, USD | Population below the poverty line |
|------------|------------------------|---------------|-------------------------------|---|
| Bangladesh | 147 | 144,000 | 2,200 | 45 % |
| Nepal | 28 | 147,180 | 1,500 | 31 % |
| Maldives | 0.3 | 300 | 3,900 | 40 % |
| Bhutan | 0.7* | 47,000 | 1,400 | 32 % |
| Source: CL | A World Factbook | * Census 2006 | | |

Establish a regional accreditation board and a regional calibration service. These proposals are part of the present evaluation.

The Asian Development Bank is currently concentrating its efforts on fostering integration between Bangladesh, Bhutan, India and Nepal, identifying cooperation projects and facilitating meetings of senior officials. The World Bank has recently finalised the design of a South Asia Regional Programme which aims to promote regional integration.

The EU proposed a regional programme in 2006 with the purpose to facilitate closer economic cooperation among member countries of SAARC. The activities of the programme are divided into three components dealing with standards, customs and private sector and research respectively. The standards component addresses the following three issues in the framework of the SAARC Standards Action Plan:

- Establish a SAARC Standards Coordination Board
- Establish a SAARC Testing and Calibration Facilitation Service,
- Establish a SAARC Quality Foundation

The total cost of the programme is estimated at Euro 4 million UNIDO plans to take part in the implementation.

B. Bangladesh

General

The past elected government of Bangladesh handed over power to a Caretaker government at the end of October 2006, an election was expected within 3 months. And 22 January 2007 was announced. However, many political parties were continuously bringing allegations of manipulation in the election. In pursuit of their demand demonstrations and violence erupted in the streets, with increasing intensity. Eventually the situation became so grave that the President was forced to declare a state of emergency. A new Caretaker government was appointed and identified corruption as the biggest problem of the country – and announced measures against it. Since then there has been a tremendous improvement in the law and order situation in the country.

The Caretaker government has vowed to create a new political climate to bring about fundamental changes in the country's overall political landscape. The unique and unprecedented crisis of politics, which led to the advent of the present government, has created the solid bases of strong popular support for it. The challenges it faces are complex and multi-dimensional. A major dimension is the need to reform and recast several constitutional bodies and the entire administration

The present caretaker government is waging a cleansing operation to free politics and bureaucracy from pervasive corruption. Scores of politicians belonging to major political parties have been put behind the bar while many others are on the run. The nation is united behind the government.

Economic Development

A new kind of dynamism is under way in both the public and private sectors in Bangladesh. The private sector is playing an important role in the industrialization of the country. The Government through the Ministry of Industries has taken the role of a facilitator. Faced with the challenges of the free market economy and globalization, the government has accepted private ownership and management of industrial enterprises as one of the major guiding forces in achieving economic growth. Quite a number of publicly managed industrial enterprises have been sold out and transferred to private ownership.

More efforts are needed to establish agro-based industries as well as to raise agricultural production. This will ensure the protection and fair price of agricultural products and employment of a huge number of unemployed people.

Some key indicators related to Bangladesh, the economy and trade are presented in Table 2 on the next page.

In order to provide administrative, institutional and infrastructure facilities in the country's industrialization, a number of government support facilities have been established. The institutions also provide assistance for industrialization by providing training on management and quality control of goods, safeguarding consumers' interests, producing and repairing import-substitute spare parts used in industries, manufacturing new tools

necessary for the production of industrial goods, and by improving efficiency and overall productivity. The Bangladesh University of Engineering and Technology (BUET) provides research, testing and consultation services as well as training of professionals to improve their skills.

Steps are being taken to properly utilize the natural and mineral resources of the country such as gas, coal, hard rock, limestone, silicon, monazite, zircon, oyster, pearl, coral fossil, seaweeds, etc. Steps are also being taken at the same time to use solar power and municipal refuse to generate electric power in order to minimize power shortage.

The industrial sector is likely to grow rapidly over the next decade raising its contribution to the country's GDP to 30 to 35 %, and the workforce in this sector is expected to increase to 35 % of national employment. In order to attain this growth, special importance is being given on agro-based and agro processing industries and on steps to overcome possible adverse conditions in the export oriented garment sector. Importance is also being given on considering the SMEs and cottage industries as one of the major driving forces, providing assistance to women entrepreneurs on a priority basis, setting up special economic zones in different parts of the country, improving the quality of industrial products to world standard, marketing of goods at competitive prices, and enhancing productivity in the industrial sector

Table 2

| Recent economic indicators: | 2001 | 2002 | 2003 | 2004 | 2005(a) | 2006(b) |
|---------------------------------------|-------|-------|-------|-------|---------|---------|
| GDP (US\$) (current prices) | 47.2 | 49.6 | 54.2 | 58.5 | 60.8 | 63.0 |
| GDP PPP (USD bn) (c) | 225.6 | 240.7 | 259.7 | 282.0 | 305.6 | 330.6 |
| GDP per capita (USD) | 335 | 345 | 370 | 392 | 400 | 407 |
| GDP per capita PPP (USD) (c) | 1601 | 1673 | 1773 | 1890 | 2011 | 2136 |
| Real GDP growth (% change YOY) | 4.8 | 4.8 | 5.8 | 6.1 | 6.2 | 6.2 |
| Current account balance (USD million) | -391 | 157 | 126 | -191 | -328 | -188 |
| Current account balance (% GDP) | -0.8 | 0.3 | 0.2 | -0.3 | -0.5 | -0.3 |
| Goods exports (% GDP) | 14.5 | 14.0 | 14.9 | 15.8 | 17.2 | 16.1 |
| Inflation ((% change YOY) | 1.5 | 3.8 | 5.4 | 6.1 | 7.0 | 6.8 |

Economic indicators for Bangladesh

(a) all recent data subject to revision; (b) IMF forecast; (c) PPP is purchasing power parity

Trade Performance

Bangladesh has developed into a major international player in the Ready Made Garments (RMG) industry. In 2005, RMG accounted for 74 % of Bangladesh export. The industry accounted for more than 2 million employees, 80 % of which are women. Additional information on trade performance is included in Table 3 on the next page.

Export Processing Zones (EPZ) have been set up in the country under the Bangladesh Export Processing Zones Act 1980 in order to help establish export-oriented industries. All infrastructure facilities including telecommunication and utilities have been provided in the zones. Under the Bangladesh Private Export Processing Zones Act 1996, permission

has also been given to bring in foreign investments or joint ventures or for setting up private export processing zones.

Keeping in mind that agro-based industries can play an important role in the socioeconomic sector of the country, cash incentives may be provided by the government to entrepreneurs of agro-based industries in EPZs, especially in the Mongla, Ishwardi and Uttara (Nilphamari) EPZs.

Table 3

Bangladesh trade performance

Global merchandise trade relationships:

Bangladesh's principal export destinations, 2005: Bangladesh's principal import sources, 2005:

| 1. | United States | 23.6% | 1 | India | 14.1% |
|----|----------------|-------|---|--------|-------|
| 2. | Germany | 13.5% | 2 | China | 13.5% |
| 3. | United Kingdom | 9.4% | 3 | Kuwait | 8.5% |

Export share by broad commodities:

| Products | Share of total % | |
|-------------------|------------------|--|
| Woven Garments | 41.58 | |
| Knitwear | 32.58 | |
| Frozen food | 4.86 | |
| Jute goods | 3.55 | |
| Leather | 2.55 | |
| Chemical products | 2.28 | |

Quality Infrastructure

Bangladesh has got a well-developed national standards institution Bangladesh Standards and Testing Institute (BSTI), which was established in 1956 and have developed about 2000 national standards. Most of them are voluntary, based on international or Indian standards. 145 are mandatory and the basis for product certification, see below. BSTI operates a WTO TBT enquiry point which is still very weak.

Bangladesh does not have a credible calibration system with international traceability, and the calibration laboratories are not accredited. The need for upgrading the legal, industrial and scientific metrology laboratories has been well accepted and it is being addressed through the ongoing Bangladesh Quality Support Programme.

Bangladesh has a number of product testing laboratories both in government and private sector. Two laboratories operated by multinational organizations are the only ones accredited. There is a definite need to upgrade the food and textile laboratories of BSTI and getting them accredited, so that exporters can have credible testing services at affordable cost.

Product certification is one of the main functions of BSTI as it operates a BSTI mark scheme. However, other countries including India with which they have a sizable trade of products with Bangladesh does not accept this product certification. Therefore, there is an absolute need to improve their product certification to comply with ISO Guide 65. This could prepare the ground for mutual for acceptance of each other's product certification. UNIDO provided initial technical assistance in Phase-1b to develop the necessary documentation, but the improved system has not been implemented yet. Further assistance seems to be required.

Bangladesh is in the process of establishing a national accreditation body, Bangladesh Accreditation Board. The Act passed Parliament in August 2006, premises have been acquired in Ministry of Industries, and the organization is being set up. Promotion workshops are organized and marketing of services will start soon.

Bangladesh has got a number of engineering colleges and management institutes, but the subject of quality management in industry is not satisfactorily covered. Further, there are no facilities for training of working industry personnel in quality tools and techniques. Thus, there is a need to develop training facilities for short courses in quality management.

Application of management standards has increased rapidly in recent years and about 600 certificates to ISOO 9001 have been awarded. ISO 9000, ISO 14000 and HAACP were promoted in Phase Ib. New standards like Food Safety Management System (ISO 22000), Occupational Health and Safety Standard (OHSAS 18000) and Worldwide Responsible Apparel Production (WRAP), a specific standard for garments industry, need promotion since they have an increasing impact on market access.

Bangladesh Quality Support Programme (BQSP) was initiated on the basis of Phase I of the UNIDO project. The budget is Euro 13.5 million, Euro 10 million is financed by the EU. The programme started 01.01.2006 and the planned duration is four years. UNIDO is the implementing agent for about 75 % of the programme, ITC of the rest.

The principal areas for UNIDO's share of BQSP are:

- BSTI metrology laboratories
- BSTI product certification
- Bangladesh Accreditation Board
- Consumer association participation in standard setting
- Quality and productivity of the textile and garment sectors

C. Bhutan

Economic Development

Bhutan is a small landlocked country. Despite this disadvantage, it has registered an average Gross Domestic Product (GDP) growth rate of around 7% during last few years. Agriculture and forestry are the major contributors to the GDP. In the industrial sector, hydroelectric power is the main contributor of exports. The availability of low cost electricity affords an opportunity for establishing power intensive industries. Ferro-alloys and cement have a good potential for exports, as do the food and wood based products. Plywood, fruit juices and alcoholic beverages are already recognized as export oriented industries and a number of units have been set up. The Bhutan economy has strong formal and informal links with the Indian economy. Virtually all trade is carried out with India. The strong growth of the Indian economy in recent years is an opportunity for increased manufactured exports to India.

While Bhutan continues to benefit from stable macroeconomic conditions in India, with the impact of global oil prices on the Indian balance of payments, there was a slight depreciation in the Bhutanese currency Ngultrum, in tandem with the Indian Rupee, by 5.4 percent against the US dollar between June 2005 and June 2006.

The real GDP growth slowed marginally to 6.5% during 2005 mainly due to the decline in construction activities during the year. Nevertheless, performance in other important sector such as tourism and financial sector were particularly impressive. Despite significant developments in the services sector, the unemployment rate in 2005 increased to 3.1% as compared to 2.5% in the previous year. As per the result of Population and Housing Census of Bhutan 2005, the majority of the economically active population is dependent on the agriculture sector.

Trade Performance

In terms of development in the policy initiatives to promote private sector growth, the Ministry of Trade and Industry is in the process of drafting sustainable tourism legislation for Bhutan. Bhutan's agreement on trade, commerce and transit with the Govt. of India was also renewed during the year. Bhutanese exporters and importers shall enjoy free and unhindered movements of goods through four new entry and exit points, to India and Bangladesh during this renewed trade agreement. The revised foreign exchange regulation which expands the legislations to cover all current and capital account transactions is also in the process of being finalized. Furthermore, in connection with Bhutan's accession process to the World Trade Organization, the third Working Party meeting was successfully concluded in October 2006, which also included bilateral meetings with interested WTO members. The working party's commendation of Bhutan progress and agreement that work the draft Working Party report could begin reflects Bhutan's tremendous achievements and is an important basis for moving the accession process forward.

| Item | Million USD |
|---|----------------|
| Electricity | 77.3 |
| Stranded wire, cables and plaited bands of copper | 17.5 |
| Carbide | 16.15 |
| Ferro-alloys | 15.54 |
| Portland cement, aluminous cement, slag cement | 14.0 |
| Ingots | 13.48 |
| Textured yarn | 10.85 |
| Magnetic discs, sound recorded | 8.15 |
| Copper wire | 7.33 |
| Particle and similar board | 6.08 |

Table 4a Top 10 Exports of Bhutan (2005)

Table 4b

Top 10 imports to Bhutan (2005)

| Items | Million USD |
|--|----------------|
| High speed diesel | 29.64 |
| Motorcars | 13.65 |
| Yarn of polyesters, partially oriented | 10.63 |
| Motor spirit (Gasoline) including aviation spirit (Petrol) | 10.46 |
| Rice | 9.55 |
| Refined copper and copper alloys, unwrought | 7.72 |
| Beer made from malt | 6.88 |
| Telephonic or telegraphic switching apparatus | 5.93 |
| Electric motors of an output not exceeding 37.5 W | 5.85 |
| Hydraulic or pneumatic instruments and apparatus | 5.74 |

Quality Infrastructure

The nucleus standards body of Bhutan is Standards and Quality Control Authority (SQCA) under Ministry of Works and Human Settlement. SQCA has a civil engineering background, as their main task is to control the quality and safety of Government buildings, roads, etc. SQCA was established in 2002 and has about 30 staff, 15 of which are professionals. SQCA operate basic laboratories for testing of building materials. Indian standards are much used in Bhutan but not adopted as national standards. Basic infrastructure and system has been provided for a TBT enquiry point, but this needs

further strengthening. SQCA has recently been appointed as national standards body for Bhutan but has not yet developed this new role. There is a considerable need for promotion of standards and quality management in Bhutan.

The country does not have any institutionalized legal or industrial metrology system. It has certain number of weights and measures inspectors under Ministry of Trade, but their verification is based on traditional systems without any scientific basis. Draft weights and measures law has been provided for enactment of legislation. Certain basic legal metrology laboratory equipment has been provided during Phase 1b of the project. There is a need to strengthen this laboratory and get it accredited.

There are no accredited test laboratories in Bhutan. Processed food is a major export product and the central laboratory of the Bhutan Agriculture and Food Regulatory Authority (BAFRA) and one field laboratory at the main export check point need to be strengthened and possibly accredited. This laboratory can also be used to exercise control over substandard imported food products in order to protect consumers in Bhutan.

The education system in Bhutan has no facilities for training in quality management. For the Bhutanese industry to compete in international market there is a need to provide training facilities on quality tools and techniques.

Management standards such as ISO 9000, ISO 14000 and HAACP were promoted in Phase Ib. New standards like Food Safety Management System (ISO 22000) and Occupational Health and Safety Standard (OHSAS 18000) need promotion since they have an increasing impact on market access.

D. Maldives

General

Republic of Maldives is an independent archipelago state consisting of approximately 1,190 low-lying coral islands grouped into 26 natural atolls, stretching over an area of 90,000 square kilometers of the Indian Ocean, and surrounded by an Exclusive Economic Zone (EEZ) covering 859,000 square kilometers. Approximately 200 islands are inhabited; the largest of which is approximately 8 sq. km. in area. The nation's capital Male', with around 2.5 square kilometers of total land area has over one third of the entire population of 298,968. Maldives' population is relatively young, with over 31 % under 15 years of age, 25 % in the 15-25 year bracket and around 5 % over 65 years of age.

The country is divided into 20 administrative atolls, loosely based around the geographic atolls. Male', an island located near the center of the archipelago is the capital and the seat of government. Administration of the other islands is overseen by the Ministry of Atolls Development, with each atoll headed by an Atoll Chief appointed by the President, and responsible to the Atolls minister. An Island Chief heads every inhabited island and is responsible to the Atoll Chief. Legislative power is vested in the Parliament (People's Majlis) and executive power is vested in the President, who is the Head of State and of Government, but is not a Member of Parliament. Maldives was declared a multi party democracy in 2005, and currently have five registered political parties, the most dominant

being the Dhivehi Raiyyithunge Party headed by the president and including his cabinet, and the opposition Maldivian Democratic Party. The political situation continues to be fluid as the current Majlis was voted in before this change, and there are no formal parliamentary party lines as yet. A special majlis has been convened to amend the constitution to reflect current needs and developments; however, this process has been slow and dominated by differences of opinion among the parties.

Economic Development

Despite significant progress in national development, Maldives still faces many challenges and development constraints similar to other small island developing states. Among these is the small size and scattered nature of its islands, the widely dispersed population, the long distances to and poor accessibility of many island communities, the vulnerability to natural disasters (as witnessed by the significant impact of the Asian tsunami of December 2004 on economic and social infrastructure) and the limited endowment of natural resources.

Real economic growth has averaged 6.6 % between 2000 and 2006, with an annual low of - 4.5 % in 2005 immediately following the tsunami, and + 18.2 % in 2006 during the subsequent reconstruction period. The domestic economy is heavily dependent on fisheries and tourism, which are the major sources of foreign exchange earnings and government revenue. These sectors, which together directly account for about 34.3 % of GDP, (while indirectly accounting for a much larger proportion) are cyclical and dependent on external markets. The fisheries sector, which has traditionally been dominated by artisanal fishing, hence employing a large number of the rural population, has grown in importance through significant public investment in the development of supporting infrastructure followed by divestiture and subsequent growth in landings and exports. Meanwhile, the tourism sector has grown from the initial development of two islands in 1972 to over eighty resort islands, many of which are presently of an extremely luxurious standard, with high occupancy rates and attracting a wealthy clientele. However, owing to import of most inputs including capital and consumption items as well as labour, only a small percentage of the tourist dollar is retained in the country. In terms of employment, these two sectors account for 19 % of total employment. The total labour force of the country is estimated at around 50 % of the working age population. Expatriate labour has played a key role in the development of the Maldives.
Table 5

MALDIVES: KEY ECONOMIC INDICATORS, 2000 - 2006

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|--|----------|----------|----------|----------|----------|-----------|----------|
| Gross Domestic Product | | | | | | | |
| GDP (1995 constant prices) Rf m n ^{1/} | 6,345.5 | 6,564.4 | 6,992.8 | 7,589.9 | 8,312.3 | 7,936.3 | 9,384.2 |
| % change in GDP | 4.8 | 3.5 | 6.5 | 8.5 | 9.5 | (4.5) | 18.2 |
| Consumer Price Index | | | | | | | |
| % change in CPI | (1.2) | 0.7 | 0.9 | (2.9) | 6.4 | 3.3 | 3.7 |
| Tourism | | | | | | | |
| Tourist arrivals ('000) | 467.2 | 461.0 | 484.7 | 563.6 | 616.7 | 395.3 | 601.9 |
| Tourist bed nights ('000) | 3,936.7 | 3,932.7 | 4,066.5 | 4,704.6 | 5,110.6 | 3,300.0 | 4,822.1 |
| Bed capacity (Resorts/Hotels) | 15,812.2 | 16,478.0 | 16,130.7 | 16,692.0 | 16,621.2 | 13,946.2 | 14,612.7 |
| Capacity utilization rate (%) | 68.2 | 65.6 | 69.0 | 77.2 | 83.9 | 64.5 | 81.8 |
| Fish Production | | | | | | | |
| Landings('000 MTs) excl. EEZ | 115.4 | 125.0 | 160.2 | 152.2 | 156.0 | 182.9 | 185.4 |
| Total fish exports ('000 MTs) ^{2/} | 28.3 | 29.7 | 44.6 | 69.8 | 75.4 | 82.1 | 111.4 |
| o.w Fresh, chilled or frozen tuna | 13.9 | 15.3 | 31.2 | 52.4 | 58.0 | 64.7 | 96.2 |
| Skipjack | 8.6 | 11.2 | 25.0 | 37.6 | 39.9 | 48.1 | 77.8 |
| Yellow fin tuna | 5.4 | 4.0 | 5.8 | 13.8 | 15.7 | 13.5 | 15.9 |
| Total fish exports (US\$ mn) ^{2/} | 34.0 | 35.8 | 49.2 | 69.1 | 84.4 | 96.6 | 128.8 |
| o.w Fresh, chilled or frozen tuna | 9.9 | 12.9 | 27.5 | 41.8 | 56.0 | 66.6 | 100.9 |
| Skipjack | 4.0 | 5.9 | 14.9 | 20.4 | 25.9 | 33.6 | 59.3 |
| Yellow fin tuna | 5.8 | 7.0 | 10.7 | 17.1 | 24.6 | 26.5 | 35.9 |
| Government Finance (Rfmn) ^{3/} | | | | | | | |
| Total revenue and grants | 2,372.7 | 2,522.6 | 2,714.9 | 3,087.9 | 3,424.7 | 4,612.9 | 7,298.7 |
| o.w. Tourism tax | 276.6 | 292.7 | 305.2 | 359.8 | 409.5 | 345.0 | 506.6 |
| o.w. Importduty | 652.6 | 661.7 | 692.1 | 817.1 | 1,135.9 | 1,245.7 | 1,712.9 |
| Expenditure and net lending | 2,694.2 | 2,885.9 | 3,117.3 | 3,388.2 | 3,582.6 | 5,657.6 | 8,144.4 |
| Overall deficit (-) | (321.5) | (363.3) | (402.4) | (300.3) | (157.9) | (1,044.7) | (845.7) |
| Balance of Payments 4/ | | | | | | | |
| Current Account | (51.5) | (58.7) | (35.7) | (31.3) | (122.3) | (268.8) | (376.2) |
| Balance on goods | (233.3) | (236.0) | (212.4) | (262.3) | (383.8) | (493.8) | (603.6) |
| Goods: credit | 108.7 | 110.2 | 132.3 | 152.0 | 181.0 | 161.6 | 225.8 |
| Goods: debit | (342.0) | (346.3) | (344.7) | (414.3) | (564.8) | (655.5) | (829.3) |
| Overall balance | (4.4) | (29.8) | 40.2 | 26.5 | 44.2 | (17.3) | 45.1 |
| Gross International Reserves (US\$ mn) ^{5/} | 123.6 | 93.8 | 133.9 | 160.3 | 204.4 | 187.1 | 232.2 |
| External Reserves in months of imports | 3.8 | 2.8 | 4.1 | 4.1 | 3.8 | 3.0 | 3.0 |
| Exchange Rate | | | | | | | |
| Rufiyaa / US\$ (End of Period) | 11.77 | 12.80 | 12.80 | 12.80 | 12.80 | 12.80 | 12.80 |

1/2006 (est.) revised on November 2006.
2/ Excluding live tropical fish.
3/ Figures for 2006 are provisional estimates
4/2006 (est.) revised on Jan 07
Source: MMA Monthly Statistics

Trade Performance

Maldives has been a member of the WTO since its inception in 1995. Maldives' trade performance is characterized by the physical and geographical realities of being an island developing state. The lack of a broad resource base means that almost all the products necessary for domestic consumption and investment have to be imported, while marine products, largely fish varieties, constitute the country's major export. Consequently, foreign merchandise trade normally records a large deficit; imports have averaged around 73 % of GDP in the last 5 years, while domestic exports have ranged between 14-16 % of GDP. Services and transfers usually show a net surplus, with service receipts being dominated by tourism and related activities. There is usually a significant outflow of transfers from the economy owing to the large expatriate work force engaged in various economic activities in the country, although in the two years following the tsunami, large inflows from grants and insurance payouts resulted in positive transfers. Official medium and long-term debt flows and inflows of capital for direct investments dominate the capital account of the balance of payments. External debt stock of the public sector and the banking system has averaged around 44.1 % of GDP during 2000-2006, with an increasing trend witnessed in the last two years.

Maldives uses import duties as its main source of tax revenue. At present, ad valorem tariffs are levied on the CIF value of imports; export duty is levied only on ambergris, at a rate of 50 %. However, in light of various trade agreements, in particular the SAFTA, the import duty structure will have to be further rationalized in the period ahead.

The import bill of the country remains relatively high and stood at around 522 % of exports in recent years. During 2006, merchandise imports (CIF) stood at USD 926.5 million which constituted of USD 317.7 million (34.2 %) attributable to consumer goods, USD 181.4 million (19.6 %) to petroleum products, and USD 427.4 million (46.1 %) to intermediate and capital goods. There has been an increasing trend in the import of all these categories in recent years, with double-digit growth witnessed from 2003 onwards. Imports have been fuelled by the strong growth in the economy in recent years, and remained buoyant despite the economic shock posed by the tsunami, in part as a result of the reconstruction effort. The bulk of imports come from Asia (around 67 % on average over the period 2000 to 2006), with Singapore accounting for 39 % of imports from Asia and 24 % of total imports in 2006, while SAARC countries account for 21 % of total imports. Imports form the Middle East account for 21 % of total with Dubai accounting for 98 % of such imports.

As for domestic exports, prior to 2005, garments constituted a significant portion of Maldives' exports as the Multi Fibre Agreement allowed for preferential access for garment export from LDC countries, resulting in other SAARC countries investing in Maldives in order to exploit the quota. However, following the MFA expiration at the beginning of 2005, export receipts of the country is almost entirely on account of marine products, 99 % of which is generally on account of fish and fish products. In 2006, total domestic exports (FOB) registered USD 158.8 million. Fresh, chilled or frozen tuna accounted for 86 % of the volume of fish exports, while dried fish comprised 6 %, canned fish, 4 % and salted fish, 2 %. Between 2000 and 2006, the export of fresh, chilled or frozen tuna varieties (skipjack and yellowfin) have increased almost seven-folds in terms of quantity, while in value terms, a ten-fold growth is seen in receipts from such exports. A higher

growth is seen in skipjack products than yellow fin, which could be directly attributable to the liberalization of the industry. Fresh, frozen or chilled skipjack exports reflect 1382 % increase in value terms and 809 % increase in metric tonnes, while export of similar yellowfin products show 196 % volume growth and 518 % increase in export receipts. In 2006, 68 % of Maldives' export receipts were from Asia, while 25 % was from Europe. Thailand received 26 % of Maldives' exports, while Japan received 15 %, Sri Lanka, 13 %, and the United Kingdom, 10 %. The SAARC region as a whole contributed 14 % of Maldives' export receipts during 2006.

Maldives has experienced rapid economic growth and development, supported by tourism and more recently by a burgeoning fisheries sector. However, the susceptibility of the economy to factors beyond its control underscores the fact that the country needs to strengthen its economic base and increase its competitiveness in the international arena in order to reduce the vulnerabilities on the external accounts and maintain a sustainable level of economic growth.

Quality Infrastructure

Maldives does not yet have a standards body. Maldives Standards and Metrology Unit (MSMU) was established during Phase1b of the project but is not manned. It is the responsibility of the International Trade Policy Division (ITPD) under Ministry of Economic Development and Trade. Until proper manning is in place, the proposed unit is extremely vulnerable. Maldives is a member of the WTO but the TBT enquiry point is not operational.

The country does not have any institutionalized legal or industrial metrology system. It has certain number of weights and measures inspectors under the Ministry of Economic Development and Trade, but their verification is based on a traditional system without any scientific basis. A draft weights and measures law was provided by UNIDO during Phase Ib. Legal metrology laboratory structure has been established within MSMU and certain basic equipment was provided during Phase 1b of the project. There is a need to strengthen this laboratory and get it accredited so that in addition to calibration of weights and measures, it can provide calibration facilities for simple scientific instruments. The field verification mechanism needs to be institutionalized and personnel trained.

The major testing needs is related to food testing. The laboratories under the Maldives Food and Drug Authority (MFDA) are not yet accredited, though MFDA is the competent authority for certification of fish products to the EU market. MFDA has received support from WHO and UNIDO but still needs certain test equipment and training to obtain accreditation. The strengthening of this laboratory will not only support fish export and tourism but also help to exercise greater control over the quality of imported food products to protect the local consumers.

There are no facilities for training on quality management in the Maldives. Training could be developed in one of the technical institutes of the Ministry of Higher Education.

Management standards such as ISO 9000, ISO 14000 and HAACP were promoted in Phase Ib. New standards like Food Safety Management System (ISO 22000) and Occupational

Health and Safety Standard (OHSAS 18000) need promotion since they have an increasing impact on the international market.

E. Nepal

General

Nepal is a landlocked independent country in South Asia and is surrounded by India in east, west and south and by China in the north. Nepal has three regions: Mountains in the north, hills in the middle and plain terrain in the south. The altitude varies from 305m in plain terrain in the south to 8848m, which is the height of Mount Everest, the highest peak on Earth.

With a population of 23 million (annual growth rate of 2.4%), and 147,181 square kilometres of land area Nepal is one of the poorest countries in the world with the per capita income of USD 269. Nearly half of its population lives below the poverty line and there are large disparities among income groups, among socio-ethnic groups and between urban and rural areas. Nepal still has a highly underdeveloped economy, with agriculture accounting for 37 percent of the

According to the 1990 constitution, Nepal was a constitutional monarchy with a parliamentary form of government that is multiethnic, multilingual, Hindu, and retains the king in the role of head of state. Under the constitution, the democratically elected Parliament consists of the House of Representatives (lower house) and the National Assembly (upper house). A parliamentary election was held in 1991. There have not been any parliamentary elections since 1999. King Gyanendra assumed the throne in June 2001 after the royal massacre the same year.

A Maoist insurgency has been ongoing since 1996, punctuated by several ceasefires. A nationwide state of emergency was in effect from November 2001 to August 2002. King Gyanendra, under the constitution's emergency provisions, suspended several constitutional rights, including freedom of expression, assembly, privacy, and property. In October 2002, the King dismissed Prime Minister Sher Bahadur Deuba after he recommended the dissolution of Parliament but was subsequently unable to hold elections because of the ongoing insurgency. A Cabinet was royally appointed to govern the country until elections could be held.

In April 2006, a second major people's movement for the restoration of democracy pressured the King to relinquish power, and on 24.04.2006, King Gyanendra reinstated the 1999 parliament that was dismissed in May 2002. Former Prime Minister Girija Prasad Koirala of the Nepali Congress Party was elected by the opposition seven-party alliance to lead the government again. Successful peace talks with the Maoist insurgents took place in 2003 and Maoist insurgents joined hands with a seven party alliance. An interim constitution is promulgated and the king is suspended from all the powers that he was enjoying. Now the government is heading towards the Constitutional Assembly Election in June 2007 to build a New Nepal. Right now the government is planning to form a new cabinet of ministers accommodating Maoist insurgents very soon. Nepal is coming back to the normal.

Economic Development

Improving the balance of payments, adequate foreign exchange reserves, modest inflation and narrowing fiscal deficits are some of the features displaying soundness of economy. However, Nepal has different trends. Following the economic reforms, Nepal made good progress in improving macroeconomic stability and accelerating economic growth in the 1990s but it did not sustain. The economy started going down by later half of 1990s. Nepal has had a positive GDP growth of 4 % in that decade, while in following years it went down to 2.7 %. In the fiscal year 2003/2004, the share of agriculture and non-agriculture sectors to GDP was 39 % and 61 % respectively.

Agriculture remains Nepal's principal economic activity employing about 76 % of population and accounting for 37 % of GDP. Because of Nepal's dependency on agriculture, the annual monsoon rain – or lack of it – strongly influences economic growth. In the last 40 years, agriculture productivity in major grains has gone down from being the highest in South Asia to being the lowest.

Manufacturing and services industry (non-agriculture) account for nearly 60 % of the GDP, of which industry is 11 %. Prior to 1990, Nepal followed the state-driven industrialization, and the trade and industry sector was dominated by state-owned enterprises. Liberalization and privatization were given priority by the governments that came to power after the restoration of multiparty democracy in 1990. However, political instability and policy inconsistency following the wave of economic reforms, effects of open border with India, high cost of capital borrowing, lack of infrastructure especially power and transportation, and weak civil service delivery have all obstructed growth of this sector.

Industry and manufacturing have grown to some extent but lag behind other economic sectors. Industrial base relies upon agriculture and imported inputs particularly from India and other third countries. Some of the large industries have also been established in the private sector to keep pace with government' policy on privatization and liberalization.

Nepal receives substantial amounts of external assistance from India, UK, USA, Japan, Germany and the Scandinavian countries along with several multilateral agencies like World Bank, ADB and UN Development Program. Foreign aid accounts for more than half of the development budget of the government.

Trade Performance

Nepal's integration with the global economy is steadily increasing and trade constitutes about 40% of GDP. Nepal became member of WTO in April 2004. However, its ability to trade globally in manufactured goods has been restricted by its being landlocked and lack of required infrastructure needed for the global trade. The WTO membership has exposed Nepal to the global trading system. Similarly, regional trading arrangements like South Asian Free Trade Area (SAFTA) and

Bangladesh, India, Myanmar, Sri Lanka, and Thailand Economic Cooperation (BIMSTEC) are likely to help Nepal's integration with the rest of the world. Nepal has bilateral trade agreements with more than 17 countries.

No license is required for exports or imports of any products other than banned or quantitatively restricted items. No duty is levied on raw materials and auxiliaries that are imported by industries in Export Promotion Zone. Exporters are allowed to retain their export earnings in their own foreign currency account and they can spend certain percentage of this amount for trade promotion activities etc.

Key figures for Nepal's international trade are presented in Table 6a.

| | million USD | Percent |
|--------------------------------|-------------|---------|
| Exports FOB, India | 586 | 67 % |
| Exports FOB, other countries | 288 | 33 % |
| Exports FOB, total | 874 | 100 % |
| Imports CIF, India | 1,562 | 62 % |
| Imports CIF, other countries | 940 | 38 % |
| Imports CIF, total | 2,502 | 100% |
| Trade Balance | - 1,628 | |
| Total Volume of Trade | 3,376 | |
| Export as share of total trade | | 25.9 % |
| Import as share of total trade | | 74.1 % |

Table 6a International Trade of Nepal

The major trading partners are: India, USA, Germany, France, United Kingdom, China, Italy, Canada, Japan, Singapore, Switzerland, Belgium, Spain Turkey, Bhutan, Bangladesh, Netherlands, Pakistan, UAE, Australia, Hong Kong, Austria, Denmark, Sweden, Thailand.

Table 6b

| | | million USD |
|----|-------------------------|-------------|
| 1. | Readymade Garments | 88.1 |
| 2. | Woollen Carpets | 83.2 |
| 3. | Vanaspati Ghee | 55.2 |
| 4. | Polyster Yarn | 49.6 |
| 5. | Pashmina Goods | 22.5 |
| 6. | Hides and Skins | 4.1 |
| 7. | Nepalese Paper/Products | 3.6 |
| 8. | Теа | 1.5 |

Major Items of Export from Nepal to Countries other than India

Major items of export to India include: Hydrogenated vegetable fat, polyester yarn, zinc sheet, GI sheet, textiles (cotton, synthetic and others), readymade garments, plastic utensils, toothpaste, pulses, cardamom, GI pipes, instant noodles, toilet soap, hide and skin, oil cakes, ginger, particle board, pashmina goods, rice bran oil, butter fat (ghee), tea, MS pipes, vegetables, herbs, stone and sand.

Export is in an increasing trend as per the available data for last five years.

Tourism

Tourism contributes up to 4.4% to national GDP. Although GDP is modest, tourism is the third largest foreign currency earner after remittances and export. Yet a worsening internal security situation threatens the tourism industry.

With eight of the world's ten highest mountain peaks--including Mt. Everest at 8,848 m. Nepal is a tourist destination for hikers and mountain climbers. The variety in Nepal's topography provides home to wildlife like tigers, rhinos, monkeys, bears, yaks, leopards, and many species of insects and birds. The country has managed to preserve some endangered species of Asia in its extensive parks and protected natural habitats. Tourist lodging, motel, hotel, restaurant, resort, travel agency, skiing, gliding, white water rafting, cable car complex, pony trekking, trekking, jungle safari, elephant riding, hot air ballooning, para sailing, polo and the scenic beauty along with a living museum of medieval Nepal can be taken as some of the main attractions for the tourist from all over the world.

It is believed that tourism has been employing more than 200,000 people but the development of tourism cannot be taken to be satisfactory. The rate of development does not at all match the potential.

Quality Infrastructure

Nepal has got a well-developed national standards institution, Nepal Bureau of Standards and Metrology (NBSM), established 1984. NSBM has adopted about 700

standards, only six of them mandatory. They are also nominated to operate a TBT enquiry point, but this and their information activities in general need to be strengthened.

Nepal does not have a credible calibration system with international traceability, and the calibration laboratories are not accredited. The need for upgrading the legal and industrial metrology laboratories is urgent. It is proposed to be addressed through the planned EU project for Nepal (see below).

As far as product testing is concerned, there is a definite need to upgrade the textile laboratory of NBSM and the food laboratory under the Department of Food Technology and Quality Control (DFTQC). Though other programmes plan to assist both laboratories, they will probably need additional test equipment and training of staff in order to become accredited.

NBSM operates a product certification mark scheme. Their product certification is not accepted by other countries, including India, with which Nepal has a sizable trade. This trade is covered by the mandatory Indian ISI Mark scheme. There is a need to improve Nepal's product certification scheme to comply with ISO Guide 65 so that they can enter into mutual agreements for acceptance of other countries' product certification marks. Some technical assistance was provided in Phase 1b, but additional assistance is required so that NBSM can get international accreditation.

None of the testing laboratories in Nepal are accredited by any internationally recognized accreditation boards. However, NBSM operates a laboratory accreditation scheme, NEPLAS, which has accredited six laboratories. The close relation between NBSM and NEPLAS creates a conflict of interest and NBSM plans to spin out the accreditation body.

The education system in Nepal has no facilities for training in quality management. For the Nepalese industry to compete in the international market there is need to develop training facilities in quality management so that the industries can improve the quality of their products and also increase their productivity.

Management standards such as ISO 9000, ISO 14000 and HAACP were promoted in Phase Ib. New standards like Food Safety Management System (ISO 22000) and Occupational Health and Safety Standard (OHSAS 18000) need promotion since they have an increasing impact on market access.

DFTQC has received assistance from World Bank and JICA to build a new building for laboratories and the WTO SPS enquiry point. Furthermore, an EU project is in the pipeline: EC-Nepal WTO Assistance Programme. The objective of the principal component is to upgrade the infrastructure of NBSM and strengthen TBT and SPS enquiry points. A second component aims to broaden the understanding in Nepal of WTO commitments and opportunities. UNIDO will be the implementing agency for the principal component with a budget of Euro 2.0 million. The principal items in this component are: Technical assistance, equipment (Euro 340,000), and training seminars etc.

III Project planning, implementation and outputs

A. Project funding

Phase Ia of the project is funded by the Government of India with USD 200,000. The appropriation letter, dated 21.05.2002, does not indicate any additional funding to cover UNIDO's project support cost, which is normally calculated at 13 % of the project cost.

Phase Ib is financed by the Government of Norway. UNIDO's budget for this phase is USD 933,000 plus 13 % project support cost (USD 121,290), total USD 1,054,290. In Norad's internal appropriation document of 21.03.2003 the total amount is USD 933,000, since UNIDO did not include the project support cost in their application to Norad. Norad later agreed to increase the budget and in the Trust Fund Agreement signed (by Norad) 16.10.2003, the appropriation is USD 1,054,290.

The appropriation has later been increased to account for interest and currency fluctuations. Per December 2006, the total budget is USD 1,027,191 plus 13 % project support cost, in total USD 1,160,725.

B. Project planning

The original version of the Project Document submitted to Norad was dated 06.01.2002 and the budget was USD 788,740. Following the agreement with India and further elaboration of the scope of the project, a new version of the project document was developed dated 28.07.2002. The PD describes both Phase Ia and Ib and is considerably more developed with respect to background information etc. than the previous version. The budget for Phase Ib has been increased to USD 933,000. Phase II is included with a budget of USD 1,500,000, without justification.

The development objective described in the PD is as follows:

Facilitate industrial development and export capabilities (and consequently spurring economic growth and employment opportunities) of the assisted countries by reducing technical barriers to trade through the strengthening of standards, metrology, testing, quality and conformity assessment institutional structures and national capacities.

The project is presented as a regional project for the four LDCs in SAARC: Bangladesh, Bhutan, Maldives and Nepal. The relationship to the three other SAARC countries, India, Pakistan and Sri Lanka, is mentioned only in passing.

The PD (in Part D) states three immediate objectives:

- Upgrade the required technical infrastructure for (a) standards development and harmonisation, (b) metrology and testing laboratories required by the selected sectors;
 (c) Standards for labelling and accreditation and/or certification of laboratories and quality systems.
- 2. National capacities for setting up HACCP, ISO 9000 and ISO 14000 schemes at enterprise level, as well as the capacity of national certification bodies to assess such systems developed.
- 3. A SAARC led regional accreditation body and a regional calibration service developed and launched.

The time schedule according to the PD was as follows:

- Phase Ia Start in October 2002, duration 15 months.
- Phase Ib: Start in December 2002, duration 24 months

The system for project management is not addressed in the PD, but in Section H: *Project reviews, reporting and evaluation* it is proposed to establish national steering committees and tripartite reviews (beneficiary governments, UNIDO and the donor).

Norad requested an assessment of UNIDO's proposal of 28.07.2002 from our company Ivar Foss Quality Management. The report was dated 12.08.2002 and included the following conclusions:

- The project is consistent with Norwegian Government strategies and relevant to the needs of the countries in question.
- The proposal for Phase Ib is in balance professionally and addresses many important problem areas. But the vast differences between the countries in question are not addressed, neither is the relation to India, the regional superpower.
- The project organisation needs clarification with respect to roles, authority and other conditions from the donor's side.
- The recommendation is to support the project, but under the condition that the start of Phase Ib is delayed in order to allow modifications to the project plans based on the outcome of Phase Ia and adoption to the conditions in each country. A revised PD is proposed. Support based solely on the PD of 28.07.2002 is not recommended.

The trust fund agreement dated 16.10.2003 did not account for the recommendations and qualifications arising from the assessment. We do not have any information as to whether UNIDO was informed in other ways regarding the conclusions and recommendations of the assessment report, which is in Norwegian.

The start of the projects was delayed, but the recommended phasing was not achieved. According to the most recent plans, the implementation phase is as follows:

Phase Ia: Start 26.05.2003, final report in January 2006.

Phase Ib: Start 10.02.2004, due to be finished by 30.06.2007.

UNIDO never revised the PD or prepared a revised project workplan. However, as the project progressed, UNIDO to some extent adapted the project to the conditions in each country and developed their internal work plans. The changes were reported in the progress reports.

C. Project Management and Methodology

The project is under the responsibility of UNIDO's Trade Capacity Building Branch, which is headed by Director, Dr. Lalith Goonatilake. The Project Manager in daily control of the project is Mr. Ouseph Padickakudi. The Project Assistant is Pradeep Paulose. This team is based in Vienna.

The field organisation is very small. Mr. Harbans Lal is the Chief Technical Advisor (CTA), based at the Federation of Indian Chambers of Commerce and Industry in Delhi, where he is Director General of the FICCI Quality Forum. The position as CTA of the project is a part time position. The CTA works closely with the Project Manager.

UNIDO has a field office for South Asia in Delhi. The Regional Director since late 2006 is Philippe R. Scholtès. He has not been involved in the project, but receives information. Before his arrival the office was unmanned.

UNIDO have appointed Project Coordinators in each country. In Bangladesh and Bhutan these are Director/Deputy Director of the standardisation body. In Maldives, the job is shared between officials of the International Trade Policy Division of the Ministry of Economic Development and Trade. Only in Nepal, there is a local UNIDO representative, Mr. Arjun K. Uphadhya. However, his contact with the project is very limited since late 2005. In reality, the Project Coordinator in Nepal seems to be the Director/Deputy Director of NBSM.

The PD specifies the establishment of Steering Committees in each country. Such committees may have been established in name, but have hardly any role in reality. Also, it is not clear what their role is supposed to be. Project control is firmly in the hands of UNIDO, Vienna and the CTA. The intended role of the Steering Committees was probably meant to be advisory.

The principal elements of the methodology applied by UNIDO are the following:

• **Consultancy**. This are generally short missions (several days to a few weeks) followed by a written report. Continuity between the missions is very limited. UNIDO has used experienced and competent international consultants. Many of them have been used on previous UNIDO missions. Consultants from South Asia (mainly India and Sri

Lanka) have been used to the extent possible. The CTA has also acted as a consultant. Few, if any, national consultants have been used, but some are available. Some national consultants have been trained in quality management systems, as part of the programme.

- **Training**. A number of training courses, mainly in management system auditing and consulting, have been organised as part of the project. See details later in this Chapter. The training courses are well proven and up to date, provided by professional consultancy and training organisations in India and UK. The qualifications of the participants have been variable, and the benefits accordingly. Training courses have been organised in Delhi or in each country to minimize travel and subsistence costs.
- **Certification.** UNIDO have contracted the international certification bodies DNV and TÜV to certify the management systems (ISO 9000, ISO 14000 and HAACP). The certification bodies have been working out of their offices in South Asia, mainly India.
- **Procurement of equipment.** This element is of limited magnitude in Phase Ia and Ib. Basic laboratory equipment for legal metrology has been supplied to Bhutan and Maldives. Maldives also received some advanced equipment for MFDA. In addition, some ITC equipment was provided. Procurement was organised from Vienna, but the equipment was shipped directly to the organisation in question. If possible, equipment was sourced locally. Total equipment cost is USD 154.673, corresponding to 15.6 % of the total expenditure for Phase Ib.

The latest financial report available to the evaluation team is dated 12.02. 2007. According to this report, the distribution of expenditures on the four countries is as shown in Table 7a:

| Distribution of expenditures on countries | | | | | |
|---|-------------|---------------------|--|--|--|
| Country | Amount, USD | % of expenditure | | | |
| Bangladesh | 415,196 | 41.9 | | | |
| Bhutan | 186,214 | 18.8 | | | |
| Maldives | 185,403 | 18.7 | | | |
| Nepal | 204,434 | 20.6 | | | |
| Total expenditure | 991,247 | 100 | | | |
| Total allotment | 1,021,191 | | | | |

Table 7a

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The distribution of expenditures on years is shown in Table 7b below:

| Distribution of expenditures on years | | | | | |
|---------------------------------------|----------------|---------------------|--|--|--|
| Year | Amount, USD | % of expenditure | | | |
| 2004 | 151,907 | 14.9 | | | |
| 2005 | 356,549 | 34.9 | | | |
| 2006 | 415,254 | 40.7 | | | |
| 2007 | 103,481 | 10.1 | | | |
| Total allotment | 1,027,191 | 100 | | | |

Table 7b

D. Project Implementation and Outputs

This section is based on UNIDO's latest progress report dated 31.12.2006 and the findings of the evaluation team. Following a summary of the main activities, this Chapter covers regional activities and the activities in each country. Proposed outputs (according to the PD), activities and actual outputs are described. A summary of the actual outputs is included at the end of the chapter.

The following main activities were undertaken in Phase 1a:

- Key institutions and officials were identified in each target country. A workshop was organized on WTO rules and TBT/SPS requirements.
- A comprehensive research study was carried out for analysis of industry sectors and their growth prospects and trade potential in all the four target countries.
- Status of standards and conformity assessment institutions in all the LDCs was assessed.
- Food being major area of exports in all the countries, training programs/workshops was organized on good manufacturing practices (GMP) and good hygienic practices (GHP) for the personnel of food processing companies in the beneficiary countries.
- Training and consultancy requirements for standards organizations and test laboratories were identified.
- Proposals for a SAARC Accreditation Board and SAARC Calibration Services were formulated.

Phase 1 b concentrated on the following activities:

Reviewing and strengthening the legal framework for standards, metrology, testing and conformity assessment.

- Establish or strengthen standards institutions, including plans for their testing facilities.
- Establish or strengthen metrology institutions, including master plans for further development.
- Management systems for quality, the environment and hygiene. ISO 9000, ISO 14000 and HACCP were introduced to industry; the companies received consultancy support and obtained certification.

Regional Activities

Proposed output 3.1: SAARC Regional Accreditation Board Established.

- Activities: Proposal for establishment of regional accreditation board has been sent to all countries including Bangladesh. This can be established only after all countries agree for such Board. Based on the work done by UNIDO, EU has proposed a SAARC Standards Harmonization Project, for which a planning meeting was held in Kathmandu in May 2006.
- Actual output: Report on a SAARC regional accreditation board. No stakeholder support has been documented for this proposal.

Proposed output 3.2: SAARC Calibration Service established.

- Activities: Proposal for establishment of SAARC Calibration Service has been sent to all the countries including Bangladesh. This can be established only after all countries agree on such a service. This activity is also included in SAARC Standards Harmonization Project discussed above.
- Actual output: Report on a SAARC calibration service. Stakeholder support has been very limited, if any, for this proposal.

Activities in Bangladesh

Proposed output 1.1: Legal framework for standards, metrology, testing and conformity assessment strengthened and brought in line with the accepted international practice.

- Activities: Bangladesh has already got basic legal framework. A separate regulation is in its place and has been brought out under the basic law for operations of Management System Certifications with the assistance from UNIDO Expert.
- Actual output: Bangladesh Accreditation Act 2006 passed by Parliament on 10 August 2006.

Proposed output 1.2: Standards and metrology institutions established/strengthened to provide the apex institutional structure to facilitate market access.

Activities: UNIDO standards expert has provided following assistance to strengthen standardization activity in BSTI:

- Provided training to BSTI staff and members of Technical Committees on methodology of development and harmonization of standards.
- Made recommendation for re-organization of standards department
- Identified computers and associated equipment required for standards work has been provided to BSTI.
- 7 persons from BSTI were given opportunity to study systems in SIRIM, Malaysia and South Korea.
- Actual output: Technical reports by UNIDO project staff and international consultants. Bangladesh Quality Support Programme, with a budget of Euro 13.5 million, was established as a follow-up of the project. See description in Section II B.

Proposed output 1.3: Twenty product standards developed and product conformity mark schemes in each country developed/strengthened.

Activities:

- UNIDO international standards consultant has assisted BSTI in identification of 20 product standards which need to be harmonized.
- The UNIDO Consultant developed detailed guidelines for harmonization of standards based on ISO guidelines. He has also provided training to the officers of BSTI in harmonization of standards. Based on this, BSTI will be taking action to harmonize their standards with their trading partners.
- The expert has submitted proposal for implementation of ISO/IEC Guide 65 for operating conformity mark scheme by BSTI. The proposal also includes recommendation for marketing of voluntary certification services to bring more licenses under the scheme with a view to improving product quality in Bangladesh industries.
- Actual output: Technical report with proposal for a modern product certification scheme. Personnel trained. The proposal has not yet been implemented and further delays are expected.

Proposed output 1.4: Master plan developed for capacity strengthening in metrology and testing.

Activities:

- UNIDO international consultant has carried out an extensive study of laboratories of BSTI. He has submitted a comprehensive report for upgrading of the textile laboratory and chemical and microbiology laboratory of BSTI. In this report he has made recommendations for upgrading buildings and other infrastructure so that the laboratory becomes of international standards. He has also identified additional test equipment for both laboratories. He has also indicated the training needs for the laboratory staff and consultancy for getting laboratories accredited.
- UNIDO international consultant, a metrology expert, has carried out detailed study of the scientific and industrial metrology laboratory of BSTI and submitted a comprehensive report which requires suitable accommodation, infrastructure which has to be provided by the Government of Bangladesh. He has also identified additional test equipment which need to be provided to upgrade these laboratories.
- Actual output: The master plans were prepared and reported as planned. One officer visited a laboratory in Germany for one week of hospitation. The metrology developments have been taken further by the Bangladesh Quality Support Programme.

Proposed output 1.5: National Certification bodies for HACCP, ISO 9000 and ISO 14000 established

Activities:

- Proposal for national certification body for Bangladesh was prepared.
- Bangladesh Government has accepted the proposal to set up National Certification Body with a management board having a representation from industries and other stakeholders.
- A consultant was deputed and has assisted Bangladesh in developing documented system for establishment of management system certification body infrastructure.
- The consultant has provided necessary training to concerned staff on implementation of documented systems for operationalization of the certification body. An operating unit with 8 employees has been established but is not as yet offering certification services.

There are today about 600 ISO 9001 certificates in Bangladesh and the number is growing rapidly

Actual output: Preparation for the certification body has been completed. The actual operation of the certification body will start after regulations are promulgated by the Government.

Proposed output 2.1: Between 15 to 20 auditors and consultants trained for ISO 9000 system development and auditing.

Activities:

- IRCA accredited ISO 9000 lead assessor course was conducted through a sub-contract at Delhi from 15-20 March 2004. 7 participants from Bangladesh attended the course
- Ten consultants for ISO 9000 systems have been trained in 3-day training course conducted at Dhaka.
- 8 consultants out of the 10 have been selected for giving practical training under international consultant while providing consultancy to 4 pilot companies in Bangladesh.
- Actual output: Training courses were organized as planned. Bangladesh participation as stated under activities.

Proposed output 2.2: A group of 10 pilot enterprises given assistance in setting up ISO 9000 system and assisted towards obtaining international certification.

Activities

Four companies were assisted to implement ISO 9000 systems by international consultants. The following activities were completed:

- Awareness and training of officers and staff of the companies about requirements of ISO 9000 system and its implementation methodology.
- Quality manual and other documentation has been developed
- Internal auditors training has been completed and first internal audit has already taken place.
- Corrective action on internal audit findings has been completed.

Actual output: All four companies have been certified

Proposed output 2.3: Between 15 to 20 auditors and consultants trained for ISO 14000 system development and auditing.

Activities:

- ISO 14000 lead auditor course was conducted through a sub-contract from 13-18 June 2005 in Delhi. 7 persons from Bangladesh participated in this course.
- 8 Consultants have been trained for providing ISO 14000 and EMS system consultancy.
- On site training provided to consultants by conducting status audit of four pilot companies.
- Consultants explained methodology of aspect evaluation and development of documentation
- Consultants are providing support to pilot companies for developing EMS documentation.
- Actual output: Training courses were organized as planned. Bangladesh participation as stated under activities.

Proposed output 2.4: A group of 10 pilot enterprises given assistance in setting up ISO 14000 system and assisted towards obtaining international certification.

Activities

Four companies are being provided consultancy for ISO 14000 systems. The following activities were completed:

- Awareness and training of officers and staff of the companies about requirements of ISO 14000 system and its implementation methodology.
- Status audit conducted for all the companies.
- Aspect evaluation explained to the core group members of companies.
- Draft environment manual and EMS procedures prepared and being finalized.
- Internal audit training carried out
- The companies are implementing the system for certification.
- Actual output: The companies have implemented the ISO 14000 systems. The certification audits are planned for April 2007

Proposed output 2.5: A group of 10 pilot enterprises given assistance in setting up GHP, GMP and HACCP systems and assisted towards obtaining international certification.

Activities:

Four companies are being assisted for establishment of HACCP systems. The following activities have been undertaken:

- Training on concept of HACCP and its implementation methodology provided.
- Food Safety Manual, HACCP plans and procedures have been prepared for each company.
- Infrastructural weakness regarding hygiene identified which are being attended to simultaneously.
- Training of internal auditors completed and at least one audit in each company has been completed.
- These companies are preparing for certification.

Actual output: All four companies passed the certification audit in February 2007

Activities in Bhutan

Proposed output 1.1: Legal framework for standards, metrology, testing and conformity assessment strengthened and made in line with the accepted international practice.

Activities

- Status of legal framework and institutions for standards related work has been assessed and comprehensive report for establishing Bhutan Standards & Metrology Center has been given to Bhutan Government which has been accepted.
- Drafts for National Standards Act and Weights & Measures Act have been provided to enable them to enact legislation.
- UNIDO expert has assisted Standards & Quality Control Authority (SQCA) of Bhutan to develop a national policy on Standards, Metrology, Testing and Quality for adoption by the Government. The policy has been submitted by SQCA to Government for approval.
- Actual output: Technical reports by international consultants. Complimentary project by UNCTAD leveraging UNIDO's inputs.

Proposed output 1.2: Standards and metrology institutions established/strengthened to provide the apex institutional structure to facilitate market access.

Activities:

UNIDO Expert provided the following services:

- Prepared feasibility report for Bhutan standards organization including corporate plan.
- Developed procedures for functioning of standards organization.
- Development of operational manual for standards formulation.
- Trained personnel of SQCA and Technical Committee Members in methodology of developing standards.
- Developed documentation for technical information center and WTO/TBT enquiry point.
- Trained personnel on operation of technical information center and TBT national enquiry point and made it operational.
- 5 personnel of SQCA Bhutan sent for study visit to Malaysia, Singapore and India.
- Assisted SQCA in establishment of conformity assessment liaison office.
- Actual output: Technical reports as specified under activities. Limited amounts of training. The TBT enquiry point is now becoming operational. SQCA personnel experienced international standardisation activities.

Proposed output 1.3: Twenty product standards developed and product conformity mark schemes in each country developed/strengthened.

Activities:

UNIDO Expert provided the following services:

- Assisted in identification of key sub sectors for standard development.
- Assisted in development of 20 product standards.
- Product conformity mark scheme in a small scale has been established to fulfill the national need.
- Actual output: Key sectors for standards development have been prepared. New standards have not yet been developed. Conformity mark scheme has not yet been established.

Proposed output 1.4: Master plan developed for capacity strengthening in metrology and testing.

Activities:

UNIDO expert assessed the needs of legal metrology laboratory and submitted Master plan covering for the Metrology Laboratory:

- Organizational structure and functions of the laboratory.
- Space and buildings required
- Technical equipment with their specifications
- Requirement of staff and their qualification
- Food testing expert of UNIDO assessed the requirements of additional test equipment for the central laboratories of BAFRA.

Actual output: The UNIDO expert has provided the master plan including lists of equipment along with technical specifications. A limited amount of equipment for legal metrology has been delivered.

Proposed output 1.5: National certification bodies for HACCP, ISO 9000 and ISO 14000 established. (Preference private sector led bodies).

- Activity: Assessment by UNIDO international consultant on the viability of a national certification body in Bhutan.
- Actual output: The assessment concluded that a national certification body is not viable for Bhutan.

Proposed output 2.1: Between 15 to 20 auditors and consultants trained for ISO 9000 system development and auditing.

Activities:

- Two national consultants were provided training on development of QMS which is continuing along with consultancy to three pilot companies.
- Four persons from Bhutan have undergone ISO 9000 Lead Auditor Training held in March 2004.

Actual output: The training was implemented as described under activities.

Proposed output 2.2: A group of 10 pilot enterprises given assistance in setting up ISO 9000 system and assisted towards obtaining international certification

Activities:

Three companies have been provided consultancy for ISO 9000 systems. The following activities have been completed:

- Awareness and training of officers and staff of the companies about requirements of ISO 9000 system and its implementation methodology.
- Quality manual and other documentation has been developed
- Internal auditors training has been completed and first internal audit has already taken place
- Corrective actions on the internal audit findings have been completed.

Actual output: The three companies have since been certified.

Proposed output 2.3: Between 15 to 20 auditors and consultants trained for ISO 14000 system development and auditing.

Activities:

- Three persons from Bhutan underwent ISO 14000 Lead Auditor Training held in June 2005.
- Two national consultants were provided training in June 2006 on environmental aspect evaluation and on development of EMS which is continuing along with consultancy to three pilot companies.

Actual output: The training was implemented as specified under activities.

Proposed output 2.4: A group of 10 pilot enterprises given assistance in setting up ISO 14000 system and assisted towards obtaining international certification.

Activities:

- Three companies were identified for technical assistance.
- Awareness and training of senior management and other staff of the companies about environmental issues, aspect evaluation and development of EMS documentation has been completed.
- Structure of EMS documentation has been finalized and documents are being prepared.

- Consultancy work has been completed.
- Actual output: The systems have been implemented and the companies are ready of the certification audit this spring.

Proposed output 2.5: A group of 10 pilot enterprises given assistance in setting up GHP, GMP and HACCP systems and assisted towards obtaining international certification.

Activities:

- Consultancy is being provided to two companies for implementation of HACCP.
- National consultants and core group of companies were trained on food safety based on HACCP system.
- Hygienic practices are being put in place as pre-requisite programs prior to implementation of HACCP. Also infrastructural weaknesses have been identified to improve hygiene and sanitation and implementation of these corrective actions are being undertaken.
- The System documentation has been completed.
- The companies are preparing for certification.

Actual output: The two companies passed the certification audits in February 2007

Activities in Maldives

Proposed output 1.1: Legal framework for standards, metrology, testing and conformity assessment strengthened and made in line with the accepted international practice.

Activities:

Based on standards needs of Maldives, following draft has been prepared and submitted to Maldives Government for legislative action:

- Maldives Standards Act
- Rules for Standards Act
- Standards of Weights & Measures
- Standards of Weights & Measures (Enforcement Rules)

Actual output: Draft legislation has been prepared as specified under activities. A Standards Act was proposed to Government in the 3rd quarter of 2006 and may take one year to pass Parliament.

Proposed output 1.2: Standards and metrology institutions established/strengthened to provide the apex institutional structure to facilitate market access.

Activities:

- Requirement of standards, metrology and conformity assessment has been studied and organizational structure for Maldives Standards and Metrology Center has been finalized and accepted by Maldives Government.
- A nucleus of Maldives Standards organization has been established to develop national standards.
- Operational document on MSMC prepared and submitted.
- The national standards council established with proposed composition.
- The following three Technical committees established:
 - o MS/TC 01 Fisheries, Agriculture & Food
 - o MS/TC 02 Basic and Management System Standards &
 - MS/TC 03 General Engineering.
- The WTO TBT National Enquiry Point and technical information center established in the Ministry of ED&T within their existing facilities.
- An operational manual for Technical Information Centre prepared.
- A draft manual on TBT National Enquiry Point prepared and submitted.
- A general training provided to the Core Group on standards preparation and operation of National Enquiry point.
- Actual output: Maldives Standards organization (MSMC) was formally established 17.07.2006, but there was no manning of the unit at the time of the evaluation. Premises are available and a unit of 3 5 persons is planned this year. Neither standardisation nor legal metrology is active at this time. Basic legal metrology equipment has been supplied. Members of the Technical committees have not yet been appointed.

Proposed output 1.3: Twenty product standards developed and product conformity mark schemes in each country developed/strengthened.

Activities:

- Manual "A Practical Guide on Formulation of Standards" prepared.
- 21 new subjects identified for formulation of Maldives standards.
- Ten draft standards prepared on fisheries products and have been sent for limited circulation.
- Actual output: The documents have been prepared as specified under activities, but no further action seem to have taken place.

Proposed output 1.4: Master plan developed for capacity strengthening in metrology and testing.

Activities:

Requirements of equipment for Legal Metrology Laboratory have been identified by CTA and report submitted to the Maldives Government.

- Test equipments for food-testing laboratory have been identified by the Laboratory Expert. The test equipment will be provided during Phase II of the Project.
- Actual output: Report on the food-testing laboratory at MFDA. Some equipment delivered. Basic equipment for legal metrology delivered.

Proposed output 1.5: National certification bodies for HACCP, ISO 9000 and ISO 14000 established.

- Activities: Assessment by UNIDO CTA on the viability of a national certification body in Maldives.
- Actual output: The conclusion was that a national certification body is not viable for Maldives

Proposed output 2.1: Between 15 to 20 auditors and consultants trained for ISO 9000 system development and auditing.

Activities:

- Four persons from Maldives have undergone ISO 9000 Lead Auditor Training.
- Seven consultants have been trained for implementing ISO 9000 Systems out of which four are undergoing practical training during consultancy being provided to two pilot companies.
- Consultants underwent QMS internal audit training.

Actual output: The training has been implemented as specified under activities.

Proposed output 2.2: A group of 10 pilot enterprises given assistance in setting up ISO 9000 system and assisted towards obtaining international certification

Activities:

Two companies have been provided technical assistance. The following activities have been completed:

- Training of company personnel in the concept of ISO 9000 standards and its implementation methodology.
- Training on developing documentation for ISO 9000 systems.
- Quality manuals and procedures have been finalized.
- Internal audit training has been completed and first internal audit conducted.
- Actual output: One company was certified in 2006. The other was ready for the certification audit at the time of the evaluation.

Proposed output 2.3: Between 15 to 20 auditors and consultants trained for ISO 14000 system development and auditing.

Activities:

- Two persons from Maldives have successfully completed ISO 14001 Lead Auditor Training in July 2005.
- Practical training to consultants was provided during ISO 14000 consultancies to the pilot companies in Maldives.

Actual output: The training has been implemented as described under activities.

Proposed output 2.4: A group of 10 pilot enterprises given assistance in setting up ISO 14000 system and assisted towards obtaining international certification.

Activities

- Training of National Consultants and company personnel on ISO 14000 awareness and documentation completed.
- Status audit and aspect evaluation of following two pilot companies completed.
- Draft Environmental Policy for both the companies and EMS documentation prepared.
- Further consultancy completed.

Actual output: Both companies have passed the certification audit

Proposed output 2.5: A group of 10 pilot enterprises given assistance in setting up GHP, GMP and HACCP systems and assisted towards obtaining international certification.

Activities:

Training provided to National Consultants and core group of companies on HACCP implementation. Consultancy to two pilot companies is in progress.

- Company personnel and consultants trained on the concept and implementation of HACCP.
- Documentation structure of HACCP system designed and explained to company personnel and national consultants.
- Infrastructural weakness identified for improvement of hygiene and sanitation.
- Improvement in hygiene practices and documentations are at the finalization stage for implementation.
- Training of internal audits has been completed.
- Companies are in the certification process.
- Actual output: Two companies were certified in 2006. One company has passed the certification audit recently. The project has encouraged these and other companies to plan for additional certification.

Activities in Nepal

Proposed output 1.1: Legal framework for standards, metrology, testing and conformity assessment strengthened and made in line with the accepted international practice.

Activities:

Nepal has already got legal framework for standardization and product certification activities under which Nepal Bureau of Standards & Metrology has been established.

- A draft regulation under the Act has been provided by UNIDO for management system certification.
- Actual output: Draft Act on Standardization, including accreditation and product certification.

Proposed output 1.2: Standards and metrology institutions established/strengthened to provide the apex institutional structure to facilitate market access.

Activities:

A standards expert was sent by UNIDO who has given following inputs to strengthen the functioning of standardization activities in Nepal:

- Development of comprehensive operational manual for standards formulation based on ISO guidelines.
- Re-organization of standardization work in the five sectoral areas of the standards department of NBSM.
- Training of NBSM personnel and technical committee members on the development process of standards.
- Development of documented system for operation of standards information center and WTO enquiry point.
- Training of personnel to make the standards information center operational.
- 3 persons from NBSM have been sent for study visit to SIRIM, Malaysia, to give them exposure to the operations of a well-run standards body.
- Actual output: The training and development of documentation was implemented as specified. This was also an effective form of organization

development. The TBT enquiry point was established and notified to WTO in 2006.

Proposed output 1.3: Twenty Product standards developed and product conformity mark schemes in each country developed/strengthened.

Activities

- Standards expert deputed by UNIDO has assisted NBSM in identification of standards for 20 products which have got high export potential. He has developed guidelines for harmonization of standards and trained NBSM personnel in harmonization of standards. Harmonization activity of the identified product standards will be carried out by NBSM themselves.
- UNIDO expert has developed a comprehensive quality manual and procedures for product certification activity for guidance of NBSM personnel.
- The standards expert also provided training to the officers engaged in the certification activity as per the new quality manual to strengthen product certification activity in Nepal.

Actual output: 20 standards were identified but no effect was apparent. Note that Nepal already possessed about 700 standards.

Proposed output 1.4: Master plan developed for capacity strengthening in metrology and testing.

Activities

- UNIDO laboratory experts Dr. D'Silva and Dr. AG Rowley studied the laboratories of NBSM and submitted a comprehensive report for upgrading including additional equipment required.
- A draft study report on test facilities in the metrology laboratory of NBSM dated 12 August 2003 already prepared as a part of the Integrated Framework for Trade Related Technical Assistance. This report also contains a brief description of the technical assistance required including test equipment.
- Actual output: The master plan was developed as planned. It covered not only NBSM but also other laboratories in Nepal, notably DFTQC. UNIDO's project also encouraged the EU to initiate a new assistance programme for Nepal, see Section II E.

Proposed output 1.5: National Certification bodies for HACCP, ISO 9000 and ISO 14000 established. (Preference private sector led bodies).

Activities:

- A technical expert has carried out a detailed feasibility study for establishing National Certification Body and has submitted the report based on which NBSM can establish a National Certification Body.
- Plan for establishment of National Certification Body in Nepal has been sent to NBSM by UNIDO.
- Draft for regulation to be issued by the Government has been provided to enable NBSM to take up system certification.
- Actual output: Technical report recommending the establishment of a national certification body for management systems in Nepal. The proposal is backed by the management of NBSB.

Proposed output 2.1: Between 15 to 20 auditors and consultants trained for ISO 9000 system development and auditing.

Activities:

- IRCA accredited ISO 9000 lead assessor course was conducted through a sub-contract at Delhi from 15-20 March 2004. 4 participants from Nepal attended the course
- Four consultants for ISO 9000 systems have been trained in 3-day training course conducted at Kathmandu. Practical training to these consultants is being provided during the consultancy to two companies in Nepal.
- Actual output: The training has been implemented as planned. Participation from Nepal is specified under activities.

Proposed output 2.2: A group of 10 pilot enterprises given assistance in setting up ISO 9000 system and assisted towards obtaining international certification

Activities:

Two companies have been provided consultancy for establishing ISO 9000 systems. The following activities have been completed:

- Training of company personnel in the concept of ISO 9000 standards and its implementation methodology.
- Training on developing documentation for ISO 9000 systems.
- Quality manuals and procedures has been finalized.
- Implementation of QMS in two companies under progress and companies are preparing for certification.

Actual output: Both companies have now been certified

Proposed output 2.3: Between 15 to 20 auditors and consultants trained for ISO 14000 system development and auditing.

Activities

- Four persons from Nepal have undergone ISO 14000 training held in Delhi in June 2005
- Five national consultants were provided training in May 2006 on environmental aspect and on development of EMS which is continuing along with consultancy to two pilot companies.

Actual output: The training has been implemented as described under activities.

Proposed output 2.4: A group of 10 pilot enterprises given assistance in setting up ISO 14000 system and assisted towards obtaining international certification.

Activities:

- Two companies have been provided consultancy.
- Awareness and training of senior management and other staff of the companies about environmental issues, aspects evaluation and development of EMS documentation has been completed.
- Environmental Manual and EMS procedures have been finalized.
- EMS has been implemented in both companies.

Actual output: Both companies have been certified to ISO 14001.

Proposed output 2.5: A group of 10 pilot enterprises given assistance in setting up GHP, GMP and HACCP systems and assisted towards obtaining international certification.

Activities

- Company personnel and national consultants have been trained in the concept and implementation methodology of HACCP
- Two companies viz., Dairy Development Corpn, Kathmandu, and Swastik Oil Industries Pvt Ltd, Hathimuda, Nepal, have been identified for providing technical assistance
- Documentation structure of HACCP has been designed by UNIDO Consultant and it has been completed by the core group of the companies under guidance of UNIDO Consultant.
- HACCP implementation in both the companies is in progress, and companies are preparing for certification.

Actual output: Both companies have now been HACCP certified.

Summary of outputs

A summary of the most measurable outputs is presented in Table 8 on the next page. The table presents the number of people or companies that have taken part in the various activities. The actual number of participants/companies is in good agreement with the proposed numbers, taken from the PD.

If all the remaining companies are certified as expected, all pilot companies will have achieved certification.

| Output number | Subject | Bangla- desh | Bhutan | Mal- dives | Nepal | Actual total | Proposed total |
|------------------|-------------------------------------|-----------------|--------|---------------|-------|-----------------|-------------------|
| | Training in industry | | | | | | |
| 2.1 | ISO 9000, lead auditor | 7 | 4 | 4 | 4 | 19 | 15 – 20 |
| 2.1 | ISO 9000, consultant | 10 | 2 | 7 | 4 | 23 | 15 – 20 |
| 2.3 | ISO 14000, lead auditor | 7 | 3 | 2 | 4 | 16 | 15 – 20 |
| 2.3 | ISO 14000, consultant | 8 | 2 | - | 5 | 15 | 15 – 20 |
| | Certification support | | | | | | |
| 2.2 | Pilot enterprises, ISO 9000 | 4 | 3 | 1 (+1) | 2 | 10 (+1) | 10 |
| 2.4 | Pilot enterprises, ISO 14000 | 0 (+4) | 0 (+3) | 2 | 2 | 4 (+7) | 10 |
| 2.5 | Pilot enterprises, HACCP | 4 | 2 | 2 | 2 | 10 | 10 |
| | Study trips | | | | | | |
| 1.2 | National standards bodies abroad | 7 | 5 | 0 | 3 | 15 | - |
| 1.4 | Laboratory hospitation | 1 | | | | 1 | 0 |

Table 8Summary of actual outputs versus proposed

Note: The number of companies in brackets has not yet been certified, but is expected to pass the audit before the end of the project period in June 2007.
IV Assessment of project results

A. Relevance

Objectives

The objective of the project is purely directed to industrial development and export capabilities. In our opinion, this is a too narrow objective. International trade is a two-way street. When the countries in question start participating in global trade, they will not only get the opportunity to export, but also they will be exposed to imports. The imports will compete with domestic goods on the home market, and unless the country has developed the necessary protective mechanisms, such as legislation, standards, border control, market surveillance, product certification etc., there is a risk that the country will receive substandard and even hazardous goods.

The WTO TBT and SPS agreements are designed to establish the rules for those protective measures that countries are allowed to implement in order to protect the health, safety, environment etc. – still allowing fair competition of legal products in the markets. The TBT and SPS agreements are defensive in their design, they are not designed to support export.

All of the SAARC LDCs expressed concern for the weak or missing protection they have of their own markets and society. It is therefore a highly relevant objective to protect societies and markets against substandard and hazardous goods.

The statement of the development objective for this project does not account for the import dimension. However, in the planning and implementation, several components related to protection of the domestic society are included, such as product certification and legal metrology. We support this, but propose that in Phase II the development objective is widened to account for the domestic dimension as well as exports. Market surveillance and cooperation with consumer organisations should also be included in Phase II.

Maldives initially requested assistance from UNIDO in developing an industrial master plan. The request was turned down because of lack of funding. Some time later, Maldives was offered participation in the SMTQ project, which was not in their mind when first requesting assistance from UNIDO.

Project Planning

The issue in this paragraph is whether the project plan, as presented in the Project Document, is relevant for the SAARC LDCs. In general terms, there is no doubt regarding the relevance. However, we have pointed out (in III B) that the project plan is highly

schematic and very much a blueprint from the previous plan for the Mekong Delta countries (Vietnam, Laos and Cambodia). We also pointed out that the assessment of the PD requested by Norad prior to committing funding was critical, but that the qualifications were not incorporated into the agreement between Norad and UIDO. Also, the results from Phase Ia were not used as basis for a revised plan for Phase Ib, since Phase Ia lasted for almost 3 years (compared to the planned 15 months).

The PD, when describing the project, uses the concepts of outputs and activities. However, no indicators are mentioned.

In summary, our opinion is that the project plan in general terms is relevant for all the four countries. But there are large differences between the countries, and the plan does not account for these. Implementation, however, to a larger extent accounts for the differences.

Legislation

The assistance in drafting legal acts for standardisation and metrology for Bhutan and Maldives is highly relevant.

In Bhutan, there is no legislation for consumer protection, but a draft exists. Such legislation is highly relevant in all countries.

Bangladesh and Nepal already had the basic legislation in place, but a revised Standards Law is needed in Nepal to account for management system certification and accreditation. The assistance in drafting the law is also highly relevant.

Standardization

In Bangladesh and Nepal standardisation was already well established in separate standards institutions. These countries received training in modern methods for standards development based on ISO methodology. This was highly relevant.

In Maldives, there is no standards body and the support to establish one is highly relevant. In Bhutan, there is a standards body for government civil works, NBSM. This body needs restructuring and will take on a new role as a national standards body, probably later this year, and UNIDOs support has been highly relevant. In 2006, UNCTAD financed a followup to UNIDO, using the same consultant, which leveraged UNIDO's support.

The study trips have some relevance, mainly in getting hands on experience in how modern standardisation works, but participants did not highlight the benefits of the study trips. The motivating effect is important. One staff member from BSTI was provided a hospitation stay at a European laboratory, which was rated as highly relevant.

Output 1.3 in developing 20 product standards and conformity mark schemes in each country is an example of the lack of national adaptation of the project. For Bangladesh and Nepal 20 new standards in addition made little difference, since they had 2000, resp. 700 already. UNIDO has pointed out that the pedagogical effect in practicing standards development is important. This argument has some merit, but was not the original

justification. For Bhutan and Maldives the action may have relevance, but has not yet been implemented.

Metrology

In Bangladesh, the master plan for strengthening the metrology sector is highly relevant, since the country does not have international traceability of its metrology standards (etalons). Relevance is supported by the fact that a large EU project is now implementing the master plan.

In Bhutan and the Maldives, development of legal as well as industrial metrology is in its infancy and the UNIDO project is highly relevant.

In Nepal, upgrading of the metrology laboratories is needed and the planning work by UNIDO is highly relevant. Implementation is expected to be financed by an EU project that is now in the pipeline.

UNIDO has proposed to establish a regional Calibration Service. This is not an organisation offering calibration services, but more a service organisation for calibration laboratories. There was a very limited support for the proposal in the four LDCs, as each country saw few problems in finding a cooperation partner (most often NPL in India) could secure international traceability of their metrology standards.

Laboratory Testing and Product Certification

In Bangladesh, the report for further development of test laboratories is regarded as highly relevant. There is a product certification scheme already, comprising 50 products and 120 companies. But the system needs to be upgraded to international standards. The UNIDO report on this is relevant.

In Bhutan, the report on upgrading of laboratories, both at SQCA and at BAFRA, is considered as highly relevant. Product certification is relevant only in the longer term.

In Maldives, the laboratories of MFDA needed further upgrading. MFDA is new as an institution; it is EU Competent Authority for the important fish export and has recently got a new and extended role. UNIDOs contribution was highly relevant. Product certification is relevant only in the longer term.

In Nepal, the textile laboratory at NBSM and the chemical and microbiological labs at FQTC are important on the national scale. UNIDO's plans are highly relevant. The product certification support is considered highly relevant.

Accreditation

Accreditation is today the dominating instrument for assessing and recognizing competence in laboratory testing, certification and inspection. It is particularly important for laboratory testing, because accredited testing in most cases replaces double or triple testing and the associated costs.

In the industrial countries, national accreditation bodies are common. In developing countries, however, the market if often too small to sustain a national accreditation body. Some regions have therefore proposed regional accreditation bodies. SADC in Southern Africa is so far the only one to have been established.

UNIDO has proposed to establish a regional accreditation body for SAARC. The proposal is not supported by any of the SAARC LDCs (or other SAARC members for that matter). India has a large and well-recognized accreditation body already and Bhutan would buy accreditation services from India. Pakistan and Sri Lanka are developing their own accreditation bodies. Bangladesh has established the Bangladesh Accreditation Board that is expected to become operational this year. Nepal has a laboratory accreditation body, NEPLAS, which needs to be separated from NBSM and upgraded, but is determined to go for a national solution. The Maldives turns to Southeast Asia for accreditation.

Against this background the proposal of a regional SAARC accreditation body is not considered relevant. Regional cooperation, for example exchange of assessors, may become a relevant issue.

Information Services

The WTO agreement lays down the requirements to all members that they shall establish one WTO/TBT and one WTO/SPS enquiry point. The tasks of the enquiry points are twofold:

- Inform the WTO secretariat in Geneva regarding planned and new legislation in their respective areas
- Inform anyone interested regarding all legislation in force in the country, within their respective areas

As a consequence, UNIDO's support to establish the enquiry points is highly relevant.

Management Systems and System Certification in Industry

In addition to developing the national quality infrastructure, the project has offered training, consultancy support and certification of management systems. The following systems have been addressed:

- ISO 9000: Quality management systems
- ISO 14000: Environmental management systems
- HACCP: Hazard Analysis and Critical Control Point systems for hygiene etc. in food processing industries etc.

This form of support has been highly appreciated in all four countries. Benefits are substantial and include increased awareness of quality, environment and hygiene; greatly reduced costs of poor quality; better motivation and smoother operation internally, fewer customer complaints, less rigorous audits etc. Also, customers in export markets value that suppliers have this form of systems. HACCP systems are required for export of certain food products (such as fish and other seafood) to Europe.

Against this background, our general conclusion is that this form of support is highly relevant. In addition, we have the following comments regarding specific countries:

- In Bangladesh, certification to ISO 9000 was developing rapidly in parallel with the project and more than 600 companies have now been certified. We question whether the UNIDO support was really required.
- In Bhutan, management systems were in its infancy when the project started, and UNIDO's efforts clearly contributed to raise awareness and quality consciousness.
- In the Maldives, management systems are highly relevant for the fish processing industries. Several companies that were involved in one form of systems have decided to extend their system to other disciplines (for example from quality to environment and/or HACCP). Management systems are also highly relevant for the tourism industry, but this has not been a target group for UNIDO.
- In Nepal, 150 companies are already certified to ISO 9001, and about 10 to ISO 14001. The carpet and garment industries both have a need for certification services. Today, this is covered by Indian and international certification bodies. These are said to offer services of highly varying standard. We therefore support the national proposal that NBSM develops a management system certification body. The condition is that NSBM discontinues its present consultancy activity, in order to avoid conflicts of interest.

B. Ownership

Government

Generally speaking, the political level in the beneficiary countries appears to have a distant view of issues related to SMTQ. However, in the Maldives and in Nepal we met some representatives with a clear understanding of the issues involved.

At the senior civil servant level in ministries for industry and trade, ownership was generally much more developed. Institutions of the quality infrastructure are the responsibilities of these ministries, or ministries of agriculture.

In Bhutan, the Ministry of Trade and Industry is only vaguely aware of the project, but supports it. The ministry is not responsible for SQCA, which comes under the Ministry of Works and Human Settlement. This illustrates the importance of choosing the right counterpart at the outset. The situation in Bhutan is expected to be resolved during 2007.

In Nepal, there is a strong conscience regarding technical barriers to trade, both in the technical and SPS area. Ministry of Industry, Commerce and Supplies is well into the subject area and strongly supports development of the national SMTQ infrastructure.

Industry

The industry interests associated with the project are organised in national chambers of commerce and industry, often with regional or business sector subdivisions.

The Federation of Bangladesh Chambers of Commerce and Industry expressed a wholehearted support to the project, and revealed proper understanding of the issues involved.

In Bhutan, the Secretary General of Bhutan Chamber of Commerce and Industry was not aware of the UNIDO project. The organisation had been briefed on several earlier occasions, but change of personnel had resulted in loss of this information

The Maldives National Chamber of Commerce & Industry expressed strong support for the concept of the project. But on the other hand pessimism was expressed, since the general interest is low and the work ethic is poorer than one would want to see. Also politically, it may be difficult to get the necessary focus and priority.

The Federation of Nepalese Chambers of Commerce & Industry focuses strongly on quality issues and instituted a national excellence award seven years ago. The federation gives strong support to the project.

Institutions of the Quality Infrastructure

The principal institution of the quality infrastructure in the beneficiary countries, except in the Maldives, is the national standards institution. In Maldives, there is no national standards institution as yet, and the Ministry of Economic Development and Trade takes the responsibility. In Bhutan, SQCA will become the national standards institute later this year.

In general, these institutions have developed a high degree of ownership internally. They embrace their various tasks and promote their own development. However, these institutions also have a task in promoting the quality issues to a wider community. In this respect, their ownership varies. For example, MFDA in Maldives credited UNIDO for having opened their eyes to a role in supporting fish export from the Maldives. Being government institutions at the outset, market orientation and customer satisfaction require a different mindset from public administration.

Consumers

Consumers have not been defined as a target group for the project. Based on the stated objective, this is reasonable. In reality, however, UNIDO does address consumer issues in the project. Consumers should therefore be heard. Consumer organisations in the countries in question are probably weak, if at all existent, but in Phase II an effort should be made to identify consumer representatives.

C. Effectiveness

Objectives

The two dimensions of the objectives, promoting export and protecting the domestic society, are discussed in a previous section of this report (III B). The lack of focus on the domestic dimension has resulted in a weaker emphasis than would have been the case if

the two dimensions had been clearly profiled from the outset. However, the fact that UNIDO has contributed to the domestic dimension even if it is not part of the development objective is positive.

The project strategy has contributed to the positive outcomes of the project. There are two principal target groups; government and the institutions of the quality infrastructure; and industry. For each group, specific outputs have been defined, preparing the ground for a consistent outcome.

Project planning

The steps of project planning are discussed in Section III B. The process may have been efficient, but on the expense of effectiveness. The schematic plan, not taking national differences into account, draw upon the ability of project management and staff to adjust to the reality as the project moves along.

The donor has accepted UNIDO's proposals, apparently without questioning, in spite of the serious qualifications contained in the independent assessment that the donor commissioned. As a consequence, the planning of Phase Ib did not benefit from the lessons learned in Phase Ia.

Project management

Given the project plan, project management has been effective with regard to implementation. With a few exceptions, all the planned outputs have been delivered.

The structure of the project, the two Phases Ia and Ib, were never realised as two distinct phases. They were developed in parallel, Phase Ia lasting 32 months from May 2003 to January 2006 rather than 15 months as planned. There was never a specific decision to this effect, apparently just delays. As a consequence, the results of Phase Ia were only to a limited extent used to adapt the plans for Phase Ib.

The donors seem to have accepted this without comments.

If Phase Ia had been completed in time and the conclusions used to modify the plans for Phase Ib, the project would likely have gained in effectiveness as well as efficiency.

Phase Ib has also been exposed to delays. The actual duration seems to be 38 months from February 2004 to June 2007 rather than 24 months as planned. The delay is partly explained by political unrest in Bangladesh and Nepal. In the Maldives, the tsunami in December 2004 forced new national priorities – and project delays.

Legislation

UNIDO's contribution to legislation is mainly the development of draft legislation for two Acts:

- Act on standardisation
- Act on weight and measures

This form of support has been offered to the countries without such legislation, in this case the Maldives and Bhutan.

Such legislation is a necessary foundation for further development of the national quality infrastructure. In Bhutan, it is expected that Parliament shall pass the act on standardisation this spring; probably the weights and measures act will also be passed. In Maldives the delay will probably be longer, due to capacity problems both in the ministries and in Parliament. However, a positive outcome is expected.

Food legislation is outside the scope of Phase Ib, but should be considered for Phase II. There is an international trend to consolidate legislation into one or a few laws, in line with the food chain principle. India established one Food Law in 2006, replacing more than 30 previous laws. Bhutan got a modern Food law in 2005. For the other countries, the situation should be assessed.

Standardization

There is no doubt that the support to development of the organisation and modern working methods for development and management of standards is effective in all four countries. The outcome is a better understanding of work methods and improved practical procedures. In the case of Bhutan and Maldives, the outcome is the start of using modern, internationally recognised work methods.

We question certain other aspects of UNIDO's strategy for standardisation. It is not clear that UNIDO intends that new standards should be based on accepted international standards or on the national or regional standards of major trading partners, such as India and the EU. The term "harmonisation" is frequently used, but not defined.

The relationship between standards and legislation also needs to be considered more in depth, since UNIDO has not demonstrated a consistent and effective strategy in this respect. The standardisation bodies are Government institutions in all cases, and standards are made mandatory when relevant for health, safety etc. Internationally, the *Reference to Standards Principle* has been steadily gaining ground over the last 20 years. According to this principle, legislation (laws, technical regulations etc.) contain only general requirements to health, safety etc. for products. In addition, there are statements such as *Products complying with the referenced standards are presumed to comply with legal requirements*. This method greatly facilitates the work of the authorities, as standards are available already for most purposes. A particular advantage is available for regional harmonisation, in that several countries may agree to refer to the same set of standards.

Metrology

The support in the metrology area is mainly planning of developments of metrological laboratories. The effectiveness of these interventions largely depends on the follow-up. If the plans are realised, the outcome may be important. If not, there will be next to nothing as regards outcome.

Effective support in development of metrology requires combined interventions consisting of:

- Laboratory equipment
- Training in operation and maintenance
- Training and consultancy support in development of management systems according to ISO/IEC 17025
- Accreditation

In Bangladesh, the ongoing EU project comprises a major component of upgrading the metrology laboratories at BSTI. The UNIDO project has sparked this project and major outcomes are expected.

In Bhutan and the Maldives, the first deliveries of equipment for legal metrology are taking place this spring, thus preparing the ground for a positive outcome. However, much will depend on the follow-up in Phase II.

In Nepal, the UNIDO report on upgrading of the metrology laboratory is highly effective. It is an important contribution to the establishment of a proposed EU project which will implement the plans.

Laboratory Testing and Product Certification

The support in the area of testing laboratories is mainly planning of laboratory development. The effectiveness of these interventions largely depends on the follow-up. If the plans are realised, the outcome may be important. If not, there will be next to nothing as regards outcome.

Effective support in development of test laboratory requires combined interventions consisting of:

- Laboratory equipment
- Training in operation and maintenance
- Training and consultancy support in development of management systems according to ISO/IEC 17025
- Accreditation
- Marketing of services

The specific plans for each country have been highly appreciated in all the countries. UNIDO's procurement competence related to modern laboratory equipment is also highly appreciated. Managers of laboratories in the beneficiary countries have, to a large extent, only seen outdated equipment.

Accreditation

The situation as regards accreditation in the SAARC LDCs is described in Section III D, regional activities. UNIDO has proposed to establish a regional accreditation board for the seven SAARC countries. The proposal appears not to take stakeholder opinions into account and we do not expect the proposal to be realised. Thus, the proposal will not be effective.

Information Services

Operational WTO/TBT enquiry points have been established in Bangladesh, Bhutan and Nepal. The enquiry points have certain problems in getting the required information on legislation in time from the various ministries. Otherwise, the enquiry points are expected to be effective.

Management Systems and System Certification in Industry

Both the training, the consultancy assistance and certification was highly appreciated in all four beneficiary countries. The companies involved pointed out specific results and there is no doubt that there is a good outcome.

We question UNIDO's training strategy from a pedagogical point of view. Lead auditor training was offered for ISO 9000 and ISO 14000. Such training requires previous knowledge and experience from the participants. Even if the participants were given the opportunity to study the course material in advance, this form of training is very demanding. Only a few of the participants had prior experience in working with management standards. The training courses as such were considered good, but it is doubtful if the participants possessed the necessary maturity to benefit properly from the courses.

The certification was carried out by DNV and TÜV as described in Section III D. The auditors were seen as strict, but fair. The approach seems to have been consistent in all the countries. Beneficiaries were given the opportunity to learn from the auditors' advice during the audits.

D. Efficiency

Donors

Both donors, the Governments of India (Phase Ia) and of Norway (Phase Ib) seem to have fulfilled their obligations in a timely fashion once the agreements were signed. The procedure leading to the signing, however, took until December 2003 in the case of Norway, 16 months after submission of the complete PD.

UNIDO

The project activities were well implemented and efficient. The cooperation with the counterparts and beneficiaries seems to have been smooth.

The methods and resources applied by UNDIO have generally been efficient. Consultants and trainers are in high regard as competent among the beneficiaries. The Steering Committees have not functioned.

Progress reports have been produced regularly. Early reports lacked an overview of the essential elements of the project. Later reports have shown some improvement.

The Project Manager in Vienna and the CTA in Delhi are both very efficient and have provided good service to the counterparts.

Document control can still be improved. The status of many reports is not clear. Different formats are used, often lacking essential information such as the theme of the report. Some of the summaries are very weak. There is no complete list of project reports. Electronic file references are inconsistent.

The UNCTAD report for support of standardisation in Bhutan in July 2006 was inadvertently presented as a UNIDO report. On the other hand, the UNIDO report from July 2005 was not included in the project report list. The error was corrected during the evaluation. Since UNCTAD used the same consultant as UNIDO, the two tasks were well coordinated.

Stakeholders in Bangladesh

The principal stakeholder in Bangladesh is Bangladesh Standards and Testing Institute BSTI. BSTI are well organised as a counterpart. The time for implementation of project results is sometimes unreasonably long. For instance, the report on improvement of the system for product certification was said to be very valuable, but still took more than 6 months to implement.

Due to the political situation in Bangladesh, and notably the emergency, the project activities had to be discontinued between October 2006 and January 2007.

Stakeholders in Bhutan

The two principal stakeholders in Bhutan are Standards and Quality Control Authority SQCA and Bhutan Agriculture and Food Regulatory Authority BAFRA.

The origin of SQCA is as an internal quality control agency for Government building and road construction works under Ministry of Works and Human Settlement. The new law on standardisation (2007) will establish SQCA'a role as the national standards body in Bhutan. SQCA has not yet taken this wider responsibility, and their efficiency with regard to communication with other stakeholders and society at large, will need to develop. The cooperation between UNIDO and SQCA has been good.

BAFRA is the integrated authority for plant health, animal health and food safety in Bhutan. BAFRA was reorganised in 2000 and again in 2003. New legislation has been developed 1994 – 2005. The organisation has developed rapidly over these years and has today an organisation and tasks in line with modern food chain management and scientific basis. The cooperation between UNIDO and BAFRA has been good.

Stakeholders in Maldives

In the Maldives, there is no national standards body. Ministry of Economic Development and Trade, International Trade Policy Division, is the principal contact point for UNIDO. The unit has extensive engagements and the capacity to address quality and standards issues is small. Civil servants expressed a keen interest in the project but at the same time pointed to the uncertainties related to their future assignments. The Minister pledged to follow up and ensure that the proposed standards unit is established in a sustainable manner this year.

Maldives Food and Drug Authority MFDA is the most important stakeholder of the quality infrastructure today. This is a new institution, with a new role, in new premises, with new staff and with new laboratories. MFDA pointed out the significance of UNIDO in clarifying their new role, notably their potential in ensuring quality and product safety in the important fish industry. MFDA is EU Competent Authority for fish export. Management of MFDA appears as competent and with high degree of ownership.

Stakeholders in Nepal

Nepal Bureau of Standards and Metrology NBSM is a well-established institution. Management has clear strategies for the future development and the ownership is strong.

The other important institution in Nepal is the Department of Food Technology and Quality Control under Ministry of Agriculture. This is the national centre for testing of food and organic material. DFTQC will soon get a new building with support from JICA and World Bank. The management expressed strong ownership for their own development, but in one case (quality assurance related to export of honey) there was a tendency to place the responsibility with the Ministry. However, the management has assured to take required initiation on the subject matter to solve the problem.

E. Impact

Objectives

There is no doubt that the project has the potential to make a major impact in its field of activity, particularly if Phase II is implemented and the domestic dimension of the objective is included.

Legislation

New legislation has a great potential to make impact, but only when the legislation is adopted as planned. This has been a slow process.

Effective implementation is also dependent upon enforcement. Dormant laws will have no impact.

Standardization

In Bhutan and Maldives, where the role of standards has not yet been defined, the development of national standardisation has the potential to make an impact on the national level.

In Bangladesh and Nepal, standardisation was already well established before the project started and more limited impact is to be expected.

Metrology

In Bangladesh there is no recognised international traceability of the metrological standards. With this situation it will not be possible to accredit laboratories, which is the basis for recognition of test reports. Phase Ib will not alone have any impact, but with the developments under the EU project substantial impact should be expected in the form of facilitating exports.

In Bhutan no impact is expected of Phase Ib. Phase II has the potential to impact consumer protection and product safety in the domestic market. The impact on export is expected to be small.

In Maldives, no impact is expected of Phase Ib. Development of calibration capacity in Phase II may impact accreditation and recognition of test results favourably.

In Nepal, the development through the proposed EU project may produce similar results as in Bangladesh.

Laboratory Testing and Product Certification

The interventions in Phase Ia and Ib have not made any impact, since the interventions are still at the planning stage. Development of laboratory services in Phase II or in other project is expected to make an impact in that export is facilitated. Product certification is expected to make an impact on consumer protection.

Accreditation

The intervention in Phase Ia has not made an impact. Neither is it expected to make an impact in Phase II. The issue of accreditation in the LDCs of South Asia is fully discussed in Section IV A.

Information Services

Development of the WTO/TBT and WTO/SPS enquiry points is expected to make an impact on the international recognition of the respective country in the WTO.

Management Systems and System Certification in Industry

Introduction of management systems and system certification in industry is a well-proven strategy for creating awareness for quality, the environment, hygiene, etc. In some business sectors management systems is a de facto market requirement. In export of certain foodstuffs to Europe, HACCP systems are regulatory requirements.

In this situation, management systems and system certification will make a definite impact on the various business sectors' ability to obtain market access. The impact is greater in those countries, business sectors and management systems for which the gaps between the present situation and the market or regulatory requirements are largest.

A precondition for getting full impact is that there is confidence between suppliers from LDCs and the stakeholders in the target market that certification is trustworthy. This is not always the case, but accreditation is a recognised instrument for boosting confidence.

Improved awareness of quality, the environment etc. will increase the impact of management systems. Pressure from buyers in target markets abroad is a highly effective way of creating impact. India's stricter system for border control related to import also produces significant impact.

Political priorities may draw attention away from quality issues. This is particularly the case when there is political unrest such as in Bangladesh and Nepal during the project period, or in the Maldives after the tsunami. In Maldives, shortage of personnel and poor work ethics also threaten development.

F. Sustainability

Legislation

Sustainability of legislation depends on two factors:

- Is the draft legislation developed in the project adopted by the relevant national authorities?
- Is the legislation enforced in practical terms?

In Bhutan, we shall get the test of the first question this year, when Parliament is expected to consider the draft law on standardisation and possibly on weight and measures.

In Maldives, both adoption of the legislation and the implementation in practice are critical issues. Close follow-up is essential.

Standardization

In Bangladesh and Nepal, standardisation is already well established, and there is no doubt that standardisation will be sustainable.

In Bhutan and in the Maldives, the role of standards has not yet been defined. Sustainability largely depends on whether one or several roles are defined. One obvious role is that standards are considered as a supplement to technical regulations. For this purpose, the "Reference to Standards" principle is widely used and very convenient. It states that "products complying with the referenced standards are presumed to comply with legal requirements".

Another common role of standards is that is included as part of the agreement between a supplier and his customer, in domestic as well as international trade. Both product standards and system standards can be used for this purpose.

In Bhutan and Maldives, further progress in 2007 will probably reveal whether the interventions regarding standardisation will be sustainable or not.

The sustainability of UNIDO's consultancy services is questionable, since most of the interventions are isolated and short-term. There are no arrangements for follow-up after the end of the project, unless new components are included in Phase II.

Metrology

For metrology, impact and sustainability is closely related. Generally, the interventions in Phase Ia and Ib are not sustainable unless they are followed up in Phase II or in other projects.

Laboratory Testing and Product Certification

The interventions in Phase Ia and Ib are not sustainable on their own. Development of laboratory services inn Phase II or in other project has the potential to become sustainable, but it is too early to judge. The same applies to product certification.

Product certification has the potential to make impact on consumer safety. However, the risk for corruption may lead to lack of trust in the certification instrument.

Information Services

WTO/TBT and WTO/SPS enquiry points are not sustainable unless they receive support from other stakeholders in the respective country. Experience shows that there will be very limited international pressure. The TBT enquiry point is normally with the national standards body, where it will receive a supportive environment. Access to information on new legislation from other ministries is, however, frequently a very weak point.

For the SPS enquiry point the situation may be similar. An added problem is that SPS issues are often distributed between several different authorities. In Bhutan and Nepal, SPS enquiry points are well organised and expected to be sustainable. In Nepal they can be Food Laboratories, Plant Quarantine Laboratories, Animal Quarantine Laboratories and Veterinary Laboratories under the umbrella of Ministry of Agriculture.

Management Systems and System Certification in Industry

As described in Section IV E, management systems and certification is a market requirement or a regulatory requirement for several business sectors and types of management systems. Sustainability is directly dependent upon the strength of these requirements. Perceived internal benefits of maintaining the systems, and certification of them, is also important. This factor was discussed in Section IV A.

The UNIDO project covered the costs for consultants and initial certification. However, maintenance of the certificates requires regular audits and the cost of these will be carried

by the respective industries. There is a risk that not all of the assisted companies will be able or willing to take that cost.

G. Horizontal Issues

Synergies

There are important synergies between the present project and other projects addressing the same issues in the SAARC LDCs. We have referred to such projects earlier, notably:

- Development of infrastructure (such as buildings and technical systems) by the national governments
- The EU project in Bangladesh (Bangladesh Quality Support Programme), see Section II B
- The proposed EU project in Nepal, see Section II E
- The UNCTAD project in Bhutan, see Section IV A
- Support from WHO to MFDA in the Maldives

UNIDO has been well aware of such projects, and in many cases contributed to initiating them. This is a very important method for leveraging the always too limited funds for the UNIDO projects.

Reflection of UNIDO Policies

One of UNIDO's policies is to integrate services from several branches into each project. The purpose is to enhance the focus on customer needs.

There is no sign of such integrated services in Phase Ia or Ib.

Reflection of Donor Policies

Norad has two policies that should be considered in all projects:

- Attention to gender issues
- Impact on the HIV/AIDS situation

These issues have to our knowledge not been pointed out to UNIDO. There is no mention of them in the agreement between UNIDO and Norad either.

In the present project we inquired regarding the effects on women-led enterprises or other contributions to strengthen the role of women in business. We found no sign that UNIDO consciously promoted this issue. However, notably in Maldives and Bhutan, a fair number of women had leading positions in certain public institutions.

The project is not expected to have potential to impact the HIV/AIDS situation, and UNIDO did not address this issue.

Working Conditions and Good Governance

Many of the companies we visited were concerned about working conditions for employees. This included both physical and social working conditions.

UNIDO have addressed some of these issues in connection with introduction of management systems for the environment. Even if these systems are focussed on the external environment, we saw examples that internal air quality (temperature, humidity, etc.) was listed a priority item.

Within the wide field of good governance, fighting corruption is an important issue for several SAARC LDCs. In Bangladesh this is a key political issue. UNIDO appears to be well aware of the problem but does not include specific actions or considerations in this respect. Services such as certification and accreditation are susceptible to corruption.

In Phase II, UNIDO has proposed to include training, consultancy and certification in social accountability, which gives and opportunity to address several of these issues.

A. Recommendations to UNIDO

The following recommendations concentrate on Phase II of the project. Recommendations refer to the draft plan for Phase II received by the evaluation team 26.03.2007.

- 1. The objective of the project should be extended to protect the domestic societies against substandard and hazardous products. Include product safety legislation, including food legislation, and enforcement border control, market surveillance, product certification etc. Project funding may limit the efforts in Phase II, but the objective should nevertheless be included.
- For Phase II, describe the roles and authorities of all UNIDO representatives and other stakeholders in the implementation of the project. Emphasise the two dimensions of the project: (1) Development of the national quality infrastructure; (2) Development of quality awareness and management systems, and improvement in industry.
- 3. Review and improve the project management set-up, in particular the following elements: The role and responsibilities of stakeholders, unambiguous project descriptions including total cost, coherence between project content, costs and time frame, change management, reporting format according to the donor's needs.
- 4. Mobilise the national Steering Committees in the planning and follow-up of Phase II in order to promote focus on national needs, sustainability and ownership.
- 5. Promote consumer organisations and make them aware of quality and product safety issues. Consider membership on the Steering Committees.
- 6. Reconsider the strategy for using international consultants with regard to achieving sustainability. Promote continuity and follow-up between missions and after the end of the project, for example by employing national consultants.
- 7. Continue organisation development of the national standards bodies and other important institutions of the quality infrastructure (particularly related to food safety). Pay particular attention to the establishment of the Maldives Standards & Metrology Centre.
- 8. Further develop UNIDO's strategies on the relationship between standards and legislation. Promote voluntary standards, international standards and emphasise the *Reference to Standards principle* (see Section IV C).

- 9. Follow up on the functioning of the newly established WTO enquiry points for TBT and SPS.
- 10. For development of metrology and test laboratories, use broader integrated components comprising planning, procurement, training, management system development, accreditation, and marketing. Mobilise other donors to fund investments in hardware. Bangladesh Quality Support Programme is a good example.
- 11. Develop and describe an accreditation strategy for laboratories and certification bodies in each of the four countries, based on the conditions and requirements in each country.
- 12. Revise the training strategy to adapt to the qualifications of the participants. Make sure that participants in the Lead Auditor Training courses have the necessary competence prior to the training course.
- 13. Extend the strategy for introduction of management systems in industry to include new systems such as ISO 22000 (food quality and safety), OSHAS 18000 (occupational health and work environment), SA 8000 (social accountability) etc. Some of these standards are not legal requirements but informal market requirements. Consumers and buyers in target markets present increasingly strict requirements not only to product quality and safety, but also to work environment, social issues, etc.
- 14. Remove the sub-component *Regional Dimension* from the project plan, Phase II. Contribute to implementation and results of the EU programme (see Section II A). Reduce the number of people sent on study trips (presently 24). Divert the budgeted amounts to support the proposed second dimension of the objective related to protection of the domestic society, see point 1 above.
- 15. Follow up the *National Pesticide Residue Monitoring Plan* and the associated testing requirements for honey export from Nepal.
- 16. Develop a broader project component for the fish harvesting industry in the Maldives in cooperation with other UNIDO branches. In addition to quality issues this industry needs support in developing the business model. A supply chain component is needed to tackle problems such as large variations in catch, cheating with licences, poor respect for agreements, poor quality consciousness but also poor reward for high quality.
- 17. Beware of the risk for corruption, for example in services such as product certification. Introduce recognised measures such as sound financial control, transparency and a supportive work environment.

B. Recommendations to the Governments

- 1. Include quality awareness and improvement, product safety and removal of technical barriers to trade in the national policies for industrial development, international trade and consumer protection.
- 2. Provide support, including material and financial resources, to the institutions of the quality infrastructure. Specify requirements to the institutions as conditions for support.
- 3. Institute reporting procedures to ascertain that project results are followed up and that recommendations are implemented.
- 4. Promote quality awareness programmes, quality management education, excellence awards, quality associations and other efforts for development of awareness and competence in quality management in industry and in the private sector generally.
- 5. Promote transparency and straightforward operating and financial procedures in conformity assessment services, such as testing and certification in order to fight corruption and promote good governance.
- 6. In **Bangladesh**, institute reporting procedures and other measures to ascertain that project outputs are implemented without delay and become sustainable.
- 7. In **Bangladesh**, ascertain that Bangladesh Accreditation Board becomes genuinely independent of BSTI.
- 8. In **Bhutan**, follow up on the adoption of the Standards Act and the Weight and Measures Act in Parliament. Later, follow up on the implementation of the Acts, notably the realisation of SQCA as a national standardisation body.
- 9. In **Bhutan**, the legislation for consumer protection should be adopted as soon as possible.
- 10. In **Maldives**, the Standards Act should be adopted as soon as possible.
- 11. In **Maldives**, the Maldives Standards & Metrology Center should be provided the necessary resources for starting operation. Of particular importance is staffing at a sustainable level.
- 12. In **Nepal**, the new standardisation law should be adopted as soon as possible.
- 13. In **Nepal**, the Government should closely follow the preparations for establishing national accreditation in Nepal.
- 14. In **Nepal**, the Government should promote the establishment of the *National Pesticide Residue Monitoring Plan* and the associated testing requirements for honey export from Nepal.

C. Recommendations to the Donor

- 1. Provide funding of Phase II of the project *Market Access and Trade Facilitation Support for South Asian LDCs.* Include a broader project component for the fish harvesting industry in the Maldives.
- 2. Promote multiplication effects by donor coordination and initiatives to new projects. Use Norwegian funding as "seed money".
- 3. Pay strict attention to the project management set-up, in particular the following elements: The role and responsibilities of stakeholders, unambiguous project descriptions including total cost, coherence between project content, costs and time frame, change management, reporting format according to the donor's needs.

D. Lessons Learned

- 1. Regional programs for the SAARC region has little merit due to major differences in size, industry structure, development stage and national sensitivity, but gives some cost-efficiency. This project in reality is four different national projects.
- 2. Consumer protection against substandard and even hazardous products is a priority need in all countries. Include this as a focused objective and plan actions related to border control, product certification and market surveillance.
- 3. Good planning, based on the specific needs of the beneficiary countries, is essential for effectiveness, impact and sustainability. Project plans must be specific to each country's needs and take stakeholder requirements into account. Good plans are also the basis for proper project management and positive relations with all stakeholders.
- 4. Project management by UNIDO and follow up by the donor(s) has improved, but there is still potential for considerable improvement. See recommendations, Section V A and C.
- 5. Donor coordination and combined financing is highly effective. UNIDO should continue to use its professional competence to convince and instil confidence to other donors in supporting these highly technical programmes.
- 6. Integrated hardware and software inputs are very effective and software is highly appreciated. For example, laboratory developments should include planning, procurement, training, management system development and accreditation, and marketing.
- 7. Support related to management systems training, consulting and certification is much in demand, gives impact and multiplier effects. New needs are developing as a consequence of developments in the target markets.

- 8. Do not restrict projects to the competence of the Trade Capacity Building Branch. Also address wider needs requiring cooperation with other UNIDO branches in order to satisfy national needs. Example: The fish harvesting industry in Maldives see Section V A.
- 9. UNIDO has developed a considerable competence in trade capacity building. This is an issue of great importance to many developing countries. UNIDO should use its competence to attract additional funding (see point 5 above) and to strengthen its efforts in other areas, notably Sub-Sahara Africa.

Annex A. Terms of Reference

DATE: January 24, 2007

Terms of Reference INDEPENDENT EVALUATION of PROJECT in the SAARC Region (TFRAS03001) covering the four countries of Nepal, Bangladesh, Maldives and Bhutan

1.0 The independent evaluation

Independent project evaluation is an activity carried out during and/or at the end of the cycle, which attempts to determine as systematically and objectively as possible the relevance, efficiency, achievements (outputs, outcomes and impact) and sustainability of the programme. The evaluation assesses the achievements of the programme against its key objectives, as set in the Programme document, including re-examination of the relevance of the objectives and of the design. It also identifies factors that have facilitated or impeded the achievement of the objectives.

2.0 Purpose

The purpose of the SAARC Region SMTQ (TFRAS03001) project independent evaluation is to enable the Government, UNIDO and donor:

- To assess the relevance and needs orientation of the project.
- To assess the efficiency of implementation: quantity, quality, cost and timeliness of UNIDO and counterpart inputs and activities.
- To assess the outputs produced and outcomes achieved as compared to those planned and to verify prospects for development impact.
- To provide an analytical basis and recommendations for the focus and (re) design for the continuation of the programme under a Phase II.

The evaluation is conducted in compliance with UNIDO evaluation policy.

3.0 Project Background

The SAARC SMTQ project covers the four countries of Nepal, Bangladesh, Bhutan and Maldives. The project objective is to "Facilitate industrial development and export capabilities (and consequently spurring economic growth and employment opportunities) of the assisted countries by reducing technical barriers to trade through the strengthening of standards, metrology, testing, quality and conformity assessment institutional structures and national capacities."

The four countries have varying assistance needs in this regard and the project has paid due attention to this fact. Nepal is one of the poorest countries in the world, yet has an expanding manufacturing base and already had a Standards and Metrology Bureau. Maldives does not have this, but needs to enlarge its exports basket. Bhutan is small and landlocked, but with a fast growing economy closely linked to India while Bangladesh is the most advanced in terms of development and standards institutions. This project should be seen as the Phase 2 and Phase 3 of the UNIDO initiative, aiming to build upon the Indian Government funded Phase 1. Phase 2 targets strengthening the standards, metrology, testing, conformity assessment, quality and productivity capacities in these countries to enable them reap the benefits of globalisation, by entering into regional trade agreements bringing mutual benefit to the region. Interventions would cover: (a) Legal and Institutional framework development; (b) Capacities development for ISO 9000, ISO 14000 and HCCP through pilot enterprise projects; (c) Setting up (private sector led) national certification bodies for ISO 9000, 14000 and HACCP; (d) detailed action plans for Metrology and testing laboratory (microbiology & chemical) development, in line with each country needs; d) promoting a regional mechanism for accreditation and metrology and equipment calibration.

Reproduced below is the financial picture of the project as of the day that the TOR was prepared:

| As per Original Project Document | Expenditure | Percentage % |
|----------------------------------|-------------|-----------------|
| (in United States dollars) | | |
| 933,000 | 824, 298.73 | 88.3% |

4. Method

The evaluation will be carried out through analyses of various sources of information including desk analysis, survey data, interviews with counterparts, beneficiaries, partner agencies, donor representatives, programme managers 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. The evaluation will make use of the results of previous evaluations.

5. The Evaluation will Address the Following Issues:

5.1 Relevance and Ownership

The extent to which:

- The counterpart(s) has/have been appropriately involved and were participating in the identification of their critical problem areas and in the development of technical cooperation strategies, and are actively supporting the implementation of the project.
- The project responds to the needs of target beneficiaries, in particular the industrial stakeholders.
- Changes of plan documents during implementation have been approved and documented.

5.2 Efficiency of Implementation

The extent to which:

- UNIDO and Government/counterpart inputs have been provided as planned and were adequate to meet requirements as per the project document objectives
- The quality of UNIDO services (expertise, training, equipment, methodologies, etc) were as planned and led to the production of outputs

5.3 Effectiveness of the Project

Assessment of:

- The relevance of the outputs produced and how the target beneficiaries use these outputs.

- The outcomes, which have been or are likely to be realized through utilization of outputs.

5.4 Impact

Identify what developmental changes (economic, environmental, social) at the target beneficiary level (industry) have occurred or are likely to occur.

Sustainability

project

- Assess the ability of the governments and institutions to independently continue the processes or the operations resulting from the outputs of the project (manpower, know-how, financial situation, market environment, etc)
- Identify the risks associated with independent operations and prepare recommendations to overcome major risks (if present).

5.6 Synergy Benefits

The extent to which there is synergy:

- Between the Indian Government funded phase 1(a) and phases 1(b) and 2 of the
 - Between the regional project being evaluated and related technical assistance projects in the region
 - With related bilateral and multilateral programmes focussing on the Doha Development Agenda and the WTO TBT and SPS agreements.

6.0 Evaluation Time Frame

| Date | Place | Assignment | |
|--------------------------------------|-----------|--|--|
| 31 January | Vienna | Briefing by Evaluation Group (Travel Oslo/Vienna/Oslo) | |
| 5 – 16 February 5 February | | First field mission Travel Oslo - Delhi | |
| 5 – 8 February | New Delhi | Meeting with CTA. Travel to Dahka | |
| 8 – 11 February | Dahka | Obtain supportive information, draw conclusions and prepare preliminary recommendations from Bangladesh. Travel to Kathmandu | |
| 11 – 16 February | Kathmandu | Obtain supportive information, draw conclusions and prepare preliminary recommendations from Nepal. Return to home base in Oslo | |
| 18 – 24 February | Home base | Reporting and other projects | |
| 25 Feb – 9 March | | Second field mission | |
| 25 Feb – 2 March | Male | Travel Oslo/Male. Obtain supportive information, draw conclusions and prepare preliminary recommendations from Maldives. Travel to Delhi | |
| 2 – 3 March | Delhi | Overnight stay in transit. Travel to Thimphu | |
| 3 – 7 March | Thimphu | Obtain supportive information, draw conclusions and prepare preliminary recommendations from Bhutan. Return to Delhi | |
| 7 – 9 March | New Delhi | Meeting with CTA. Travel New Delhi/Vienna | |
| 9 March | Vienna | Debriefing and presentation of draft conclusions and recommendations with UNIDO HQ and the donor. Return to Oslo, home base | |
| 10 – 28 March | Home base | Preparation of draft report and submission of draft to UNIDO on 28 March | |
| 29 March– 4 April | Home base | Time for comments by UNIDO | |
| 8 April | Home base | Deadline for comments by UNIDO | |
| 9 – 11 April | Home base | Finalization of report. Deadline 11 April | |
| 16 or 17 April | Vienna | Donors meeting in Vienna (Travel Oslo/Vienna/Oslo) | |

7.0 Composition and Requirements of the Evaluation Team

The evaluation team will be composed of the following:

- International evaluation expert (appointed in agreement with NORAD)
- Government nominated evaluation experts from Bangladesh. Nepal, Bhutan and Maledives, well acquainted with industry-relevant institutional framework of the country will participate in their respective segments of the mission.

Members of the evaluation team must not have been directly involved in the design and/or implementation of the projects.

All members of the evaluation team will be contracted by UNIDO. A staff member of the UNIDO Evaluation Group may participate in part of the evaluation missions as appropriate.

Annex B. List of Organizations visited and persons met

Bangladesh

The evaluation consultants Ivar Foss and M. Imtiaz Hossain participated in all meetings.

| Date and time | Organisation visited | Name and position |
|---------------------------|--|---|
| 06.02.2007 1800 - 1930 | Lobby of Hotel Sonargaon Introductory meeting | Md. Liaquat Ali (BSTI) |
| | | Lutfur Rahman Rabby, Director (Metrology) |
| | | Humayun Kabir (BSTI) |
| 07.02.2007 | Bangladesh Standards and Testing | M. Azmal Hossain, DG, BSTI |
| 1000 - 1500 | Institute | M. Liaquat Ali, Director (Physical) |
| | | M. Lutfur Rahman, Director (Metrology) |
| | | M. Shaifqur Rahman, Director (Standards) |
| | | M. Shariful Alam, Dy. Director (Certification Marks) |
| | | Syed H. Kabir (Quality Manager) |
| 07.02.2007 | Ministry of Industries | M.Zafar Ullah, Joint Chief, MoI |
| 1545 - 1630 | | M. Liaquat Ali, Director, BSTI |
| 08.02.2007 | Ministry of Industries | M. Nurul Amin, Secretary, MoI |
| 0930 - 1015 | | M. Liaquat Ali, Director, BSTI |
| 08.02.2007 1015 - 1115 | Bangladesh Accreditation Board | S. Zaman Mojumdar, Consultant, Ex-Secretary & Ex-Director General, BSTI |
| 08.02.2007 1115 - 1200 | Bangladesh Quality Support Programme | David Holborne, Chief Technical Adviser |
| | | M. Anwar, National Project Coordinator, BQSP Project |
| 08.02.2007 1200 - 1230 | Bangladesh Accreditation Board | M. Liaquat Ali, Director General, BAB |
| 08.02.2007 | Orient Food Company | Saeed-uz-Zaman, Director, OFC |
| 1240 - 1330 | | Mahfuz-uz-Zaman, Chairman, OFC |
| | | M. Liaquat Ali, Director, BSTI |
| 08.02.2007 1530 - 1615 | Federation of Bangladesh Chambers of Commerce and | Mohammed Ali, First Vice President, FBCCI |

| | Industry (FBCCI) | Syed Jamal Uddin, Secretary General, FBCCI |
|---------------------------|----------------------------------|---|
| | | Dewan Sultan, VP |
| | | M. Liaquat Ali, Director, BSTI |
| 08.02.2007 | Bangladesh Standards and Testing | M. Ajmal Hossain, DG, BSTI |
| 1030 - 1743 | Final summary meeting | M. Liaquat Ali, Director BSTI |
| | i mai summary meeting | M. Lutfur Rabby, BSTI |
| | | M. Akteruzzaman, BSTI |
| | | S. Hymayun Kabir, BSTI |
| | | M. Lutfur Rahman Khan, Director (CM), BSTI |
| | | M. Shariful Alam, BSTI |
| 10.02.2007 1000 - 1145 | Dignity Garments | A. B. Moinuddin Hossain, Chairman andManaging Director Zubayer Iqbal, Manager M. Liaquat Ali, Director, BSTI |
| 10.02.2007 1200 - 1415 | TRZ Garments | HaaronArRashid,ManagingDirector.VicePresidentBangladeshGarmentManufactureres & Exporters Ass.KMHH Ansari, Director Operations |
| | | Manager Administration, TRZ |
| | | Hamidul Haque, Consultant, ISO |
| | | M. Liaquat Ali, Director, BSTI |
| | | Ms. Shamim Ara, Ass. Director, BSTI |
| 10.02.2007 1515 - 1645 | Lobby of Hotel Sonargaon | Evaluation team meeting |
| 10.02.2007 | Institute of Engineers | M.A. Hannan, IEB Rector |
| 1700 - 1830 | Stakeholder meeting | Monjur Hossain, Orient Food Co. |
| | | Aktaruzzaman, BSTI |
| | | Shahadat Hossain Khan, FBCCI |
| | | A. Rashid, BSTI |
| | | Amjad Uddin Ahmed, Freelance Consultant |
| | | Delwar Hossain, Crown Melamine |
| | | M. Yeahea, ESC |
| | | M. Giasuddin, TRZ Garments |
| | | Apu, TRZ Garments |
| | | Hamidul Haque, Consultant |

| | | Sharmin Ara, BSTI |
|---------------------------|--------------------------|----------------------------|
| | | Sazzadul Bari, BSTI |
| | | Golam Azam, BSTI |
| | | Mainuddin Khan, Consultant |
| | | M. Liaquat Ali, BSTI |
| 11.02.2007 0945 - 1100 | Lobby of Hotel Sonargaon | Evaluation team meeting |

Bhutan

The evaluation consultants Ivar Foss and Rosy C. Nirola participated in all meetings.

| Date and time | Organisation visited | Name and position |
|---------------------------|---|---|
| 03.03.2007 1500 - 1700 | Standard & Quality Control Authority (SQCA), Thimphu | Mr. Karma Yezer Raydi Director and SARRC SMTQ project coordinator. Mr. Dil Ranjan Chettri Standards Division, SQCA. |
| | | Mr. Tashi Wangchuk Head, Material Testing and Research Division, SQCA. |
| | | Mr. Chewang Rinzin W.T.O Enquiry point. Electrical engineer, SQCA. |
| | | Mr. H.N Adhikari Assistant Engineer, Material Testing and Research Division, SQCA. |
| 05.03.2007 1000 - 1230 | Bhutan Agriculture and Food Regulatory Authority (BAFRA) | Mr. Karma Dorji. Executive Director, BAFRA. |
| | | Mr. Jamyang Phuntsho. Chief Laboratory Officer. |
| | | Mr. Thuji. Chief Regulatory and Quarantine Officer. |
| | | Dr. Sithar Dorji. Senior Regulatory and Quarantine Officer |
| 05.03.2007 1430 - 1515 | Bhutan Chamber of Commerce and Industries (BCCI) | Mr. Phub Tshering. Sectary General (BCCI) |
| 05.03.2007 1530 - 1630 | Ministry of Trade and Industries, Department on Industry | Mr. Dhanraj Subbha. Joint Director |
| 06.03.2007 1000 - 1115 | Bhutan Agro Industries Limited | Mr. Ugyen Rinzin. General Manager |

| 06.03.2007 1145 - 1330 | Standard & Quality Control Authority (SQCA), Thimphu | Mr. Dil Ranjan Chhetri Standards Division, SQCA. Mr. Tashi Wangchuk Head, Material Testing and Research Division, SQCA. |
|---------------------------|---|---|
| | | Mr. Chewang Rinzin W.T.O Enquiry point. Electrical engineer, SQCA. |
| | | Mr. H.N Adhikari Assistant Engineer, Material Testing and Research Division, SQCA. |
| 06.03.2007 1500 - 1630 | Standard & Quality Control Authority (SQCA), Thimphu | Mr. Dil Rangan Chettri. Standard Division, SQCA. |
| | Round table meeting with stakeholders | Mr. Jamyang Phuntsho. BAFRA, Ministry of Agriculture. |
| | | Mr. Chewang Rinzin. Electrical Engineer, SQCA. |
| | | Ms. Chime Lham Bhutan Agro Industries Limited. |
| | | Mr. Jamyang. Soil and Plant Analytical Laboratory. |
| | | Mr. Dhanraj Subbha. Joint Director, Department of Industries, Ministry of trade and Industries. |
| | | Mr. H.N Adhakari. Assistant Engineer, SQCA. |
| | | Mr. Tashi Wangchuk. Head, MTRD. |

Maldives

The evaluation consultants Ivar Foss and Shafeenaz Sattar participated in all meetings.

| Date and time | Organisation visited | Name and position |
|---------------------------|--|---|
| 26.02.2007 1500 - 1615 | Introductory meeting | Shafeenaz Sattar, National Evaluation Consultant |
| 27.02.2007 0900 - 1050 | Maldives Food and Drug Authority | Moosa Anwar, Director General Fathmath Safoora, Lab Technologist Thooma Adam, Junior Microbiologist Aishath Naila, Junior Lab Scientific Officer Shazla Mohamed, Junior Lab Scientific Officer |
| 27.02.2007 1100 - 1200 | Ministry of Economic Development and Trade | Solih Hussain, Economic Affairs Officer, International Trade Policy Division Ahmed Mighdad, Secretary, International Trade Policy Division Ahmed Hunaif, Secretary, International Trade Policy Division |
| 27.02.2007 1215 - 1300 | Horizon Fisheries Pvt Ltd | Adnan Ali, Managing Director Ibrahim Waseem, Deputy Managing Director Mohamed Rasheed, General Manager |
| 27.02.2007 1430 - 1600 | Cyprea Marine Foods Pvt Ltd | Ibrahim Sodhooq, General Manager Rajesh, Head of Quality Control |
| 27.02.2007 1615 - 1715 | HMS Maldives Pvt Ltd | Hassan Manik, Managing Director Fathimath Dhimna, Administrator |
| 28.02.2007 1000 - 1045 | Ministry of Fisheries, Agriculture & Marine Resources | Hassan Afsal, Food Technologist (Fisheries) Hussein Rasheed, Deputy Director (Agriculture) Ismail Rasheed, Agriculture Officer (Agriculture) |
| 28.02.2007 1115 - 1230 | Maldives Industrial Fisheries Company Ltd | Mohamed Adil Saleem, Managing Director Mariyam Majidha Hassan, |

| | | Head of Corporate Department |
|---------------------------|---|--|
| 28.02.2007 1300 - 1420 | Maldives National Chamber of Commerce and Industry (MNCCI) | Mohamed Shihab, Member, Executive Committee |
| 28.02.2007 1500 - 1550 | Ministry of Economic Development and Trade | Solih Hussain, Economic Affairs Officer, International Trade Policy Division |
| 28.02.2007 1630 - 1730 | Ensis Fishing Pvt Ltd | Mohamed Waseem, Managing Director Hussain Afeef, Manager Dinesh, Production Manager |
| 01.03.2007 1100 - 1200 | Ministry of Economic Development and Trade Final roundtable meeting | Mohamed Rasheed, General Manager, Horizon Fisheries Pvt Ltd Hassan Manik, |
| | | Managing Director, HMS Maldives Fathimath Dhimna |
| | | Administrator, HMS Maldives Mohamed Shihab, Member, |
| | | Executive Committee, MNCCI Abdulla Saeed, Director, Ensis Fishing |
| | | Hussain Afeef, Manager, Ensis Fishing |
| | | Aishath Naila, Junior Lab Scientific Officer, MFDA |
| | | Shazla Mohamed, Junior Lab Scientific Officer, MFDA |
| | | Solih Hussain, Economic Affairs Officer, ITPD, MEDT |
| | | Ahmed Mighdad, Secretary, ITPD, MEDT |
| 01.03.2007 1300 - 1400 | Ministry of Economic | Mohamed Jaleel, Minister |
| | | Officer, International Trade Policy Division |

Nepal

The evaluation consultants Ivar Foss and Poorna Manandhur participated in all meetings.

| Date and time | Organisation visited | Name and position |
|---------------------------|---|---|
| 11.02.2007 1700 - 1830 | Arrival in Hotel Annapurna, Kathmandu, Nepal | Poorna Prasad Manandhar, National Evaluation Consultant |
| 1,00 1000 | | Mr. Mohan Singh Khadka, Deputy Director General. |
| 12.02.2007 | Nepal Bureau of Standards and Metrology(NBSM), Balaju, | Mr. Shrikrishna Shrestha, Director General. |
| 1000 1200 | Kathmandu. | Mr. Mohan Singh Khadka, Deputy Director General. |
| | | Mr. Sita Ram Joshi, Deputy Director General. |
| | | Mr. Laxmi Prasad Gupta, Director, Certification Division. |
| | | Mr. Kulprasad S. Sapkota, Director, Standard Formulation Division. |
| | | Mr. Bidur Govinda Amatya, Director, Metrology Laboratory. |
| | | Mrs. Rajani Shrestha, Director, Laboratory Accreditation division. |
| | | Mr. Prakash Mani Adhikari, Director, Laboratories Division. |
| | | Mr. Surendra Subedi, Director, Conformity Assessment Division. |
| | | Mr. Minesh Shrestha, Director, WTO and Trade Division |
| 12.02.2007 1545 - 1715 | Federation of Nepalese Chamber of Commerce and Industries | Mr. Chandi Raj Dhakal, President. |
| (F | (FNCCI), Teku, Kathmandu. | Mr. Kush Kumar Joshi, Second Vice President. |
| | | Mr. Vijay Bahadur Shrestha, Chairman, Productivity and Quality Committee. |
| | | Dr. Dev Bhakta Shakya, Executive Director, Agro- Enterprises Centre. |
| 13.02.2007 0900 - 0930 | Hotel Annapurna, Durbar Marga, Kathmandu. | Mr. Arjun Upadhya, UNIDO Coordinator, Nepal |
| 13.02.2007 | Government of Nepal, Ministry | Mr. Purusottam Ojha, |

| 0930 - 1200 | of Industry, Commerce and Supplies, Singh Durbar, | Officiating Secretary, Government of Nepal, |
|---------------------------|--|--|
| | Kathmandu. | Mr. Tej Ratna Shakya, Joint Secretary, (MoICS) and UNIDO Nodal Person. |
| 13.02.2007 1200 - 1330 | Department of Food Technology and Quality Control, Babar Mahal, Kathmandu. | Mr. Uttam Bhattarai, Director General, Department of Food Technology and Quality Control (DFTQC). |
| | | Dr. Amriteswori Rajbhandari, Deputy Director General, Laboratories. |
| | | Mrs. Jeevan Lama, Deputy Director General, Quality Control. |
| | | Mrs. Sushma Upadhyaya, Food Research Officer, Laboratory Division. |
| | | Mr. Ganesh Dawadi, Food Research Officer and SPS Enquiry Point. |
| | | Mr. Mohan Maharjan, Assistant Food Research Officer |
| 14.02.2007 1030 - 1145 | Dairy Development Corporation (DDC), Lainchour, Kathmandu. | Dr. Raghab Kishore Bhattaraya, Officiating General Manager |
| | | Mr. Bhairav Manandhar, Branch Manager |
| 14.02.2007 1200 - 1300 | Trishakti Cables, Dillibazar, Kathmandu. | Gyanendra Lal Pradhan, Managing Director and Chairman of the Board. |
| | | (Awarded with best manager of the year 2006) |
| 14.02.2007 1300 - 1400 | Vishakarma Cement, Putalisadak, Kathmandu. | Mr. Purusottam Lal Sanghai, Chairman |
| | | Mr. S.P Agrawal, Managing Director |
| 14.02.2007 1500 - 1630 | Nepal Bureau of Standards and Metrology(NBSM). Final roundtable meeting | Approximately 20 persons from several institutions |
| 14.02.2007 1700 - 1730 | Hotel Annapurna | Poorna Prasad Manandhar, National Evaluation Consultant |
Vienna, Austria

| Date and time | Organisation visited | Name and position |
|---------------------------|---|--|
| 31.01.2007 0930 - 1700 | UNIDO Head Quarter. Project briefing | Mr. Peter Loewe, Senior Evaluation Officer, UNIDO |
| | | Dr. Lalith Goonatilake, Director, Trade Capacity Building Branch, UNIDO |
| | | Mr. Ouseph Padickakudi, Project Manager, Trade Capacity Building Branch, UNIDO |
| | | Mr. Pradeep Paulose, Trade Capacity Building Branch, UNIDO |
| | | Chin Pen Chua, Chief, UNIDO Asia and the Pacific Programme |
| | | Mr. Ivar Foss, Ivar Foss Quality Management AS Oslo, Norway |
| 09.03.2007 0330 - 1720 | UNIDO Head Quarter. Mission debriefing | Mr. Peter Loewe, Senior Evaluation Officer, UNIDO |
| | | Dr. Lalith Goonatilake, Director, Trade Capacity Building Branch, UNIDO |
| | | Mr. Ouseph Padickakudi, Project Manager, Trade Capacity Building Branch, UNIDO |
| | | Mr. Ivar Foss, Ivar Foss Quality Management AS Oslo, Norway |

Delhi, India

| Date and time | Organisation visited | Name and position |
|--|---|---|
| 06.02.2007 0800 - 1000 | Centaur Hotel, Delhi | Lieut Gen. H. Lal, Director General and Chief Technical Adviser, SAARC SMTQ Sohrab, Quality Care Services Mr. Ivar Foss, Ivar Foss Quality Management AS Oslo, Norway |
| 08.03.2007 0930 – 1100 & 1245 1730 | FICCI Quality Forum, Federation House, New Delhi | Lieut Gen. H. Lal, Director General and Chief Technical Adviser, SAARC SMTQ Mr. Ivar Foss, Ivar Foss Quality Management AS Oslo, Norway |
| 08.03.2007 1100 - 1230 | UNIDO Regional Office, UN House, New Delhi | Philippe R. Scholtès, UNIDO Regional Director for South Asia Lieut Gen. H. Lal, Dir. Gen. and Chief Technical Adviser, SAARC SMTQ Mr. Ivar Foss, Ivar Foss Quality Management AS Oslo, Norway |

Annex C. Questions for interview support

1. Relevance, ownership and needs orientation

Premise: Development of trade (export) leads to a positive and desirable impact on UNIDO development goals (such as reducing poverty). Note examples of confirmation.

- 1.1 Does development of SMTQ lead to more competitive business sectors?
- 1.2 Have other UNIDO services been considered as a supplement to the present project?
- 1.3 Are the interventions adapted to the business structure of each of the four countries, and to other national conditions?
- 1.4 Do the priorities of the project cover the issues with the highest priority? Within the public sector? In private sector?
- 1.5 Does the project have the right counterparts?
- 1.6 Have the counterpart and other stakeholders developed ownership to the project?
- 1.7 Have beneficiaries taken part in development of project priorities? For Phase Ib? For Phase II?
- 1.8 Have any important needs been overlooked?
- 1.9 Have the effects of other ongoing or planned interventions been considered when planning the project?

2. Effectiveness

- 2.1 Is it possible to point to specific outcomes (results) from interventions (such as training, consultancy, planning)?
- 2.2 Are the outcomes in agreement with what was earlier planned or intended?
- 2.3 Are the outcomes useful? For industry? For suppliers of food/agroproducts? For SMTQ institutions? For Government?

3. Efficiency

- 3.1 To what extent has the organisational and management systems and processes contributed to or hindered the efficiency of implementation? UNIDO HQ? UNIDO field structure? Counterpart organisations?
- 3.2 To what extent has the Project Document contributed to efficient implementation?

- 3.3 Have inputs been provided as planned, and in time? By UNIDO? By Norad? By the Governments? By other public stakeholders? By private sector stakeholders?
- 3.4 Have the methods and resources for implementation been cost-effective?
- 3.5 Rate the quality of the consultants on a scale from 1 5. (1: No value; 5: Exellent)
- 3.6 Have administrative procedures been cost- and time-effective?

4. Impact

- 4.1 Has the project caused, or is it expected to cause, any development changes in the national SMTQ structure? Which? Only positive, or any negative?
- 4.2 Can the impacts be attributed to the project alone, or are there several contributing factors?
- 4.3 Are the external conditions to achieve impact in place?
- 4.4 Are there ways in which the impact could be enhanced, without increasing the amount of inputs?

5. Sustainability

- 5.1 Will the stakeholders be able to maintain the outcomes and impacts achieved through the project? Government? SMTQ institutions? Private sector stakeholders?
- 5.2 Will the stakeholders be able to continue and expand/upscale the development without further support?
- 5.3 Mention risks that may realistically jeopardize the outcomes/impacts.
- 5.4 Prioritise issues for which continued support is essential.

6. Synergies

- 6.1 Are there synergies between the project and related technical assistance projects in the country?
- 6.2 Are there synergies between the project and other private sector initiatives in the region?
- 6.3 Are there synergies between the projects in the four countries?

7. Crosscutting issues

- 7.1 Does the project promote women-led enterprise or otherwise contribute to strengthen the role of women in business?
- 7.2 Does the project contribute to acceptable working conditions, noably for women?
- 7.3 Does the project promote good governance practices?

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