BACKGROUND PAPER No. 2

Trade Capacity Building Background Paper

Building-up trade infrastructure:

Lessons from strengthening the enabling environment for supply side development and conformity assessment

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Building-up Trade Infrastructure: Lessons from strengthening the enabling environment for supply side development and conformity assessment

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List of abbreviations

BIPM	International Bureau of Weights and Measures
EMS	Environmental Management System (ISO 14001)
EU	European Union
EU FVO	European Union Food and Veterinary Office
HACCP	Hazard Analysis and Critical Control Point
IAF	International Accreditation Forum
ILAC	International Laboratory Accreditation Cooperation
ITC	International Trade Centre
ISO	International Standards Organisation
ISO 9001	ISO 9001 Quality Management System
ISO 14001	ISO 14001 Environmental Management System
ISO 17025	ISO 17025 Laboratory Accreditation
ITI	Industrial Technology Institute
LDC	Least Developed Country
MRA	Mutual Recognition Agreement
MTS	Multilateral Trading System
NAB	National Accreditation Board
NMI	National Metrology institute
NSI	National Standards Institute
QMS	Quality Management System (ISO 9001)
SA 8000	Social Accountability Standard
SME	Small and Medium Enterprise
SMTQ	Standards, Metrology, Testing and Quality
SPS	Agreement of Sanitary and Phytosanitary Measures
TBT	Agreement on Technical Barriers to Trade
TRTA	Trade Related Technical Assistance
TT&SC	Textile Training & Services Centre
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization
WTO	World Trade Organization

Building-up Trade Infrastructure: Lessons from strengthening the enabling environment for supply side development and conformity assessment

Abstract

The present world trade environment provides opportunities for developing countries and economies in transition to derive tangible benefits if producing competitive value added manufactured goods for global markets. Nevertheless, most developing countries remain marginalized. The "Doha Development Agenda" aimed at assisting developing countries to become more effective partners in a global trading environment and initiatives such as the EU EBA or the US AGOA have opened potential markets by reducing duties and quotas. But the lack of competitive productive supply capacities and the lack of compliance with remaining technical market specifications (standards and technical regulations) continue to be difficult obstacles for developing countries and often prevent from effectively entering international markets. Developing countries have expressed their concern about their difficulties to beneficially integrate into the Multi-lateral Trading System (MTS), their exporters inability to enter markets, and stressed the need to strengthen the institutional environment for the development of a competitive supply capacity, able to meet global market entry requirements, an to develop the institutional environment to prove compliance, as well as for the facilitation of trade-related transactions, and in particular cross-border flows of goods.

UNIDO has analysed the constraints faced by developing countries' potential exporters in accessing global markets, and in particular the need to strengthen the enabling environment for private sector/trade development. Two key imperatives have been identified, which fall into UNIDO's core mandate: on one hand the development of an enabling environment for the development of competitive supply capacities; on the other hand, the development of the enabling environment for proving compliance of products and enterprises with international market requirements such as standards, technical regulations, quality and environmental management system standards, food safety and consumer protection, etc.

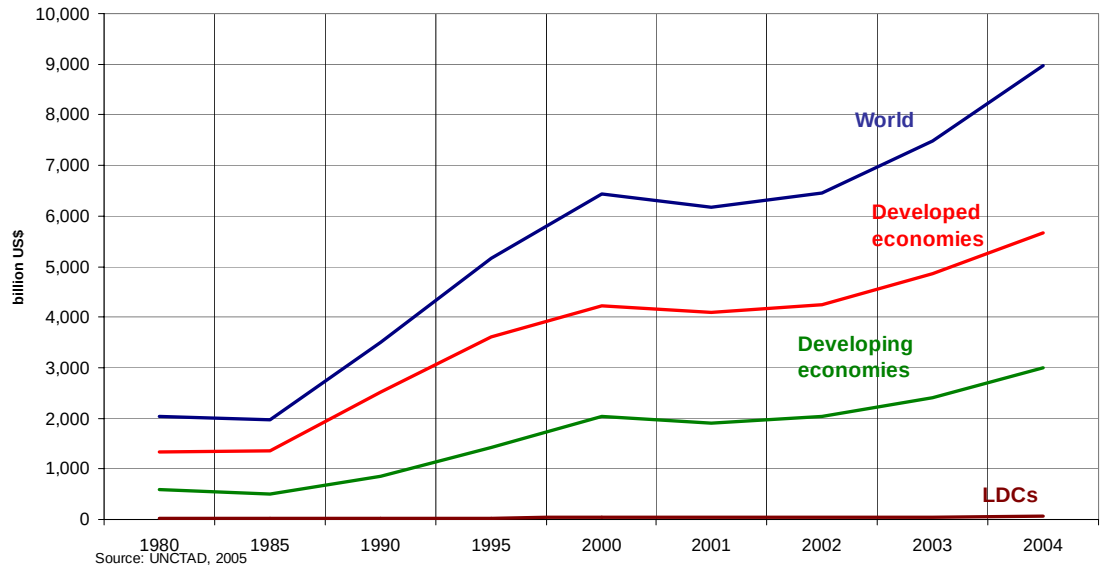
It has become apparent, that as an essential part of the enabling environment for private sector development, and in particular taking into account the continuing further regulation of the rule based multi-lateral trading system, the strengthening of institutional infrastructures and capabilities for standardization and conformity assessment play a very catalytic role for trade development and need to be a development priority. UNIDO has therefore launched in 2002 its "Trade Capacity Building" Initiative, which addresses these needs through UNIDO's capacity building services, while at the same time integrating with expertise in complementary areas, available with other agencies and technical assistance providers.

With regard to the "Priorities for Business Environment Reform in Asia" and in particular to "trade related conducive elements of the business environment", the paper presents a holistic approach to building trade related institutional infrastructure, highlights the benefits of creating an enabling environment for compliance with the requirements of the multi-lateral trading system and its agreements, in particular those on TBTs and SPSs, and highlights UNIDO's experiences in and lessons from developing such enabling environment for trade, with particular emphasis on recent project experience from the development of standards and compliance infrastructure in the Asian region.

1. Impact of WTO on the enabling environment for trade

Global trade has increased significantly over the last decades, after years of trade related negotiations, the Uruguay round, culminating in the establishment of the World Trade Organisation (WTO) and the conclusion of a series of agreements on tariffs and trade. For all the reductions in and elimination of tariffs and quotas while being a decisive element in the trade liberalisation process, the volume of additional developing country exports to developed country markets and the associated developmental impact has been limited. Despite their standing to gain additional export earnings, the developing countries have been unable to take full advantage of the moves made by the industrialised countries to open up markets[1]. The export performance of developing countries has been patchy. Merely opening up economies is not enough. In a world driven by innovation and technical change, the focus has to be on competitiveness development, the supply of public goods, incentive systems and development of institutional support capacities enabling or facilitating the integration of developing countries enterprises and products into global trade relations.

Figure 1: World Trade 1980-2004



Since the creation of the WTO, global trade has been facilitated through the completion of a more and more sophisticated set of rules and regulations, which on one hand make trade relations more predictable, but on the other hand create important challenges for developing countries for their implementation.

2. Key trade-related constraints faced by developing countries

The reasons for the developing countries' failure to benefit from the opportunities offered by the rapidly changing global markets clearly are not for want of reductions in tariffs and quotas; the reasons clearly lie elsewhere. As the developing countries themselves recognise[2], they lack:

a) **Capacity to produce according to international market requirements** in a competitive manner through an effective industrial productive capacity ensuring optimisation of production and product/export diversification;

b) **Ability to prove compliance of products and producing enterprises** with requirements set by international buyers in an internationally recognized manner;

[1] Trade Capacity Building: Role of UNIDO and the Multilateral System, UNIDO, May 2003, p.4
[2] cf. Plan of Action adopted at the LDC III Conference 2003 and the rationale behind the market access initiative in the New Partnership for Africa's development (NEPAD)

c) **Capacity to integrate into the multilateral trading system** (MTS), and fully implement its rules and regulations.

First, many developing countries, and in particular LDCs lack the supply capacity to produce goods that are able to compete in terms of quantity, quality and price in export markets. Many developing countries enjoy potential competitive advantages in agro-based industries, yet only a small proportion of produce is processed at present. Post-harvest losses are extensive, owing to the lack of storage facilities, infrastructure and even knowledge of the most basic techniques for conversion and manufacturing. Repair and maintenance facilities are deficient. Added to that is the lack of affordable and reliable energy services, especially in rural areas. However, adding value to raw materials is recognized being a main element of creating wealth at local level and for achieving a greater share in export markets.

Second, and in addition to improving their productive capacities so as to have an adequate volume and range of goods to sell, the developing countries have to compete in a highly demanding rules-driven trading system. Over and above the basic product specifications, exporting countries have to be ready to meet increasingly stringent requirements applied to goods in terms of quality, safety, health and the environment. Their inability to do so entails high actual and potential economic and social costs. International standards and conformity assessment systems do make an important contribution to the global economy as they improve the efficiency of production and facilitate the conduct of international trade. At the national level, standards play a significant part in the provision of public goods and reduce consumer costs, thus contributing to social advancement.

Third, many developing countries, and in particular again LDCs, face difficulties, both with their integration into the MTS through WTO accession, and with their effective implementation of WTO agreements and rules. Related challenges range from the lack of capacity to negotiate WTO accession, the lack of participation of the private sector in such negotiations, insufficient trade/export financing schemes, difficulties (mainly of SMEs) to access tailored, affordable market intelligence services, and last but not least the lack of appropriate physical trade-related infrastructures such as roads, telecommunication, harbours, airports, or cool chains. So far, considerable improvements have been achieved in these areas, in particular on trade facilitation issues.

The recent Aid for Trade G8 Initiative has recognized that increased focus has to be placed on the development of competitive supply capacities and the strengthening of recognized compliance infrastructures and services, in order to further develop trade flows in a two-way manner. Both, the development of a competitive private exporting sector, and the development of standardization, product testing and other conformity assessment capabilities, have always been part of the core mandate of UNIDO. More recently, since 2002, they have been further developed into a more systemic approach to " Trade Capacity Building". This approach explicitly integrates with complementary expertise from other agencies and technical assistance providers, such as WTO, ITC, UNCTAD or bi-lateral technical institutions, in order to go beyond a mandate driven service provision and trying to achieve a holistic inter-agency response to the challenge of trade development through trade capacity building.

As a complementary contribution to the Private Sector Development debate, the present paper mainly advocates the need to strengthen the enabling environment for establishing and proving compliance with market requirements, which at the same time will allow for integration into the MTS and for the implementation of its rules and regulations. The paper will show case the essential components of an enabling business environment for exports and trade development, particularly with respect to standards and conformity assessment and how these components support private sector development. Recent UNIDO technical assistance programmes in the Asian region will illustrate some of the required institutional capacity building. Lessons from these projects attempt to identify what could be considered good practice making future technical assistance endeavours more effective.

3. Key objectives of the institutional environment for compliance

In the not so distant past, achieving and proving compliance with international market requirements has often been neglected or taken as a given, while concentrating trade-related capacity building on the, necessary, improvement of cross-border flows of goods (trade facilitation issues). With regard to compliance to MTS rules, two WTO agreements are of particular importance for developing countries' effective trade participation: the Agreement on Technical Barriers to Trade (TBT) and the Agreement on Sanitary and Phyto-Sanitary (SPS) measures. Both agreements define how countries can use standards and technical regulations in particular for the

protection of their consumer health and safety and of the environment, as well as which infrastructure and services need to be in place for efficient trade participation.

While the TBT and SPS related institutional infrastructure and services are taken for granted in industrialized countries, usually importing markets, such is often not the case for most of the developing, potentially exporting, countries where even the rudimentary blocks of this infrastructure are missing. This disparity was acknowledged when the two agreements were drafted, and therefore a special clause has been introduced to suggest that industrialized countries should provide related technical assistance if so requested by those countries not having the full infrastructure in place. Subsequently some technical assistance was provided, but the achievements are scattered so far, and remain behind the fast advancing progress in testing technology and the often resulting more stringent technical requirements for product compliance. As a consequence, local capacity in many developing countries, and in particular in LDCs, is far from reaching the required level to allow for an equitable implementation of the two agreements mentioned above.

Two main vectors of compliance are key to develop trade capacity, the capacity to achieve compliance at the level of exporting enterprises and/or products, and the capacity to prove such compliance with international market requirements in an internationally recognized manner. We focus in this paper mainly on the enabling environment (infrastructure and related services) for the proof of compliance.

The matrix below illustrates the needs of the exporters related to the main areas of TBT/SPS compliance requirements (standards, testing, metrology, system certification, inspection, traceability, packaging and labelling), and the related infrastructure and institutional services needed to support these requirements.

Exporter's Needs	**Compliance Requirement**	**Necessary Infrastructure and/or service**
Access to standards and technical regulations	Product standards/technical regulations, including packaging and labelling[3]	Reference centre in standards body or other
Local product testing recognized by the (international) client	Internationally recognized (accredited) conformity assessment services	Testing laboratory upgrading towards internationally recognized accreditation, MRAs between accreditation bodies
Accuracy of measurement, precision manufacture	Internationally recognized equipment calibration, measurement traceability to SI (measurement) standard	Metrology laboratory upgrading towards internationally recognized accreditation, inter- calibration schemes
Insurance of continuity of product characteristics and quality	Enterprise Quality Management System Certification (ISO 9001)	Certification & consultancy capacity and internationally recognized certifiers
Insurance of continuity in management of environmental impact	Enterprise Environmental Management System Certification (ISO 14001)	Certification & consultancy capacity and internationally recognized certifiers
Food safety assurance	Management system to control food contamination (HACCP)	Certification & consultancy capacity and internationally recognized certifiers
Assurance of consumer concerns relating to child labour, workers exploitation, etc.	Social accountability (SA8000)	Certification & consultancy capacity and internationally recognized certifiers
Traceability of products and inputs from fork/shelve to farm/producer	Traceability system	Certification & consultancy capacity and internationally recognized certifiers
Examination of shipment content to order	Product inspection	Cross border inspection services

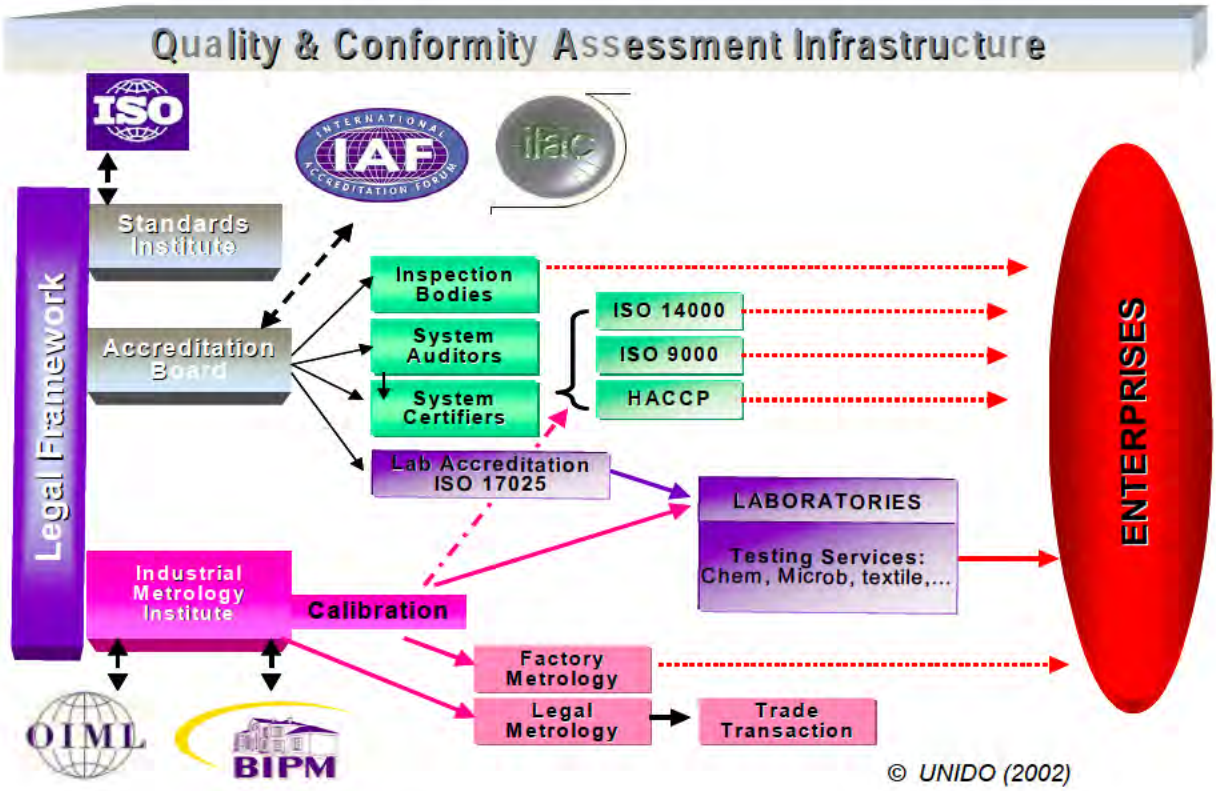
[3] Packaging and labelling: There are a number of regulations set up in developed countries prevailing to packaging and labelling. The packaging and labelling aspects though important for market access do not strictly fall into the TBT/SPS category. Nevertheless we DO include them as being an important element of market access.

4. Compliance Infrastructure – Need for a Public Good?

4.1 Main elements of the institutional environment for compliance

The above needs of exporters illustrate that a complex Standards, Metrology, Testing and Quality (SMTQ) infrastructure is required to support the TBT/SPS agreements and related institutional services for the proof of compliance. Figure 2 below summarises the key elements of the SMTQ infrastructure requirements that need to be in place either in a country or through division of labour within a region for the proof of compliance.

Figure 2: Schematic presentation of national SMTQ infrastructure for compliance



Foremost, each country must formulate the legal framework to establish two key institutions namely: a National Standards Institute (NSI) and a National Accreditation Board (NAB). The standards body is responsible for standards formulation, dissemination, consumer protection and market surveillance. It needs to be a member of the international standards setting organisations (ISO, CODEX) and also functions as the de-facto TBT and SPS "Enquiry Point". The National Accreditation Board (NAB) forms a vital part of the "conformity assessment infrastructure". At the domestic level, the NAB is responsible for accrediting laboratories, system certifiers and inspection bodies. By subjecting itself to a peer-evaluation process undertaken by the two international bodies ILAC (for laboratories) and IAF (for system certification), the NAB aspires to qualify to sign Mutual Recognition Agreements (MRAs), with these world bodies so that the local conformity assessment infrastructure obtains global recognition, which in return will facilitate, for example, the recognition of tests conducted in one country laboratory in another country, without having to resort to duplicative testing.

Each country also requires a National Metrology Institute (NMI), to house primary physical standards for dimensions such as mass, volume, length, temperature, pressure, electrical parameters etc. The Paris based International Bureau of Weights and Measures (BIPM) is the international institute that governs the global recognition of physical measures and the global traceability of such measures. In addition, an NMI is necessary for a country science and technology development, and technology acquisition. It also forms a useful infrastructure link to maintain the market place commercial transactions related to legal metrology (weights and measures). In the area of manufacturing, ensuring precision manufacture and quality depends on the metrology

capability of the country. Measuring tools, equipment and process machinery, as well as laboratory testing equipment need to be regularly calibrated to ensure that measurement traceability to the international dimension standards is accurately maintained. Similarly, certification to ISO 9001, ISO 14001 and laboratory accreditation to ISO 17025, demands traceable accuracy in measurement through a national NMI.

Enterprises require management system certification to ISO 9001, ISO 14001, HACCP, SA8000 and the like. The NSI is generally responsible for creating awareness at enterprise level on these systems and training auditors. To obtain such system certification, the country needs to have internationally accepted certification bodies.

In the field of testing, enterprises require testing services in the area of chemical testing, microbiology testing, textile testing, leather testing etc. In the current global trade context, laboratories providing such services must have obtained international accreditation of their services, in order to ensure the global acceptance of the certificates issued, and to avoid costly duplicative foreign testing.

Once this compliance infrastructure comprising of NSI, NAB, NMI, system certifiers and laboratories is established, enterprises can obtain locally services in the form of standards information, calibrations, testing and certifications; services which are internationally recognized, or based on international good practice, and which therefore can facilitate confidence of global markets into local products.

4.2 The rational for a Public Good provision of compliance services

If a market needs compliance related infrastructure and services, why don't we let the market establish them? Where would lay the advantage of using technical assistance to foster the development of infrastructure and services for compliance? An answer to these questions can be found by taking a closer look at the public/private good character of such services.

Some of the compliance services, such as the ones related to standards setting and harmonization, maintenance of national metrology/calibration standards (dimension standards), as well as accreditation of laboratories, inspection bodies, system certifiers etc. can clearly be seen as sole public goods. Such services would not be provided by private entities, as their character makes them unfit for a commercial operation. Nevertheless, these services are indispensable to (exporting) producers (and for local consumer protection issues).

Other compliance services, such as for product testing, inspection and enterprise systems certification, are often equally considered as public goods as they don't exist sufficiently in many developing countries. Also considering the consumer protection angle, the public sector engages in their provision as a response to a market failure, where private supply did not respond to the demand. Nevertheless, such compliance services could be privately provided (even for consumer protection related testing, etc. under contract for public authorities).

While acknowledging the theoretically "semi-public good" character of compliance services for product testing, inspection, and enterprise systems certification in a developing country context, and while aiming at ultimately private market driven solutions to such services, a reflection needs to be made on the usefulness to temporarily kick-start such compliance services through an initial (but commercially based) public good provision.

Kick-starting would allow for the front-loading of local compliance services, which are necessary to support local trade development, and would mainly facilitate international market entry for small and medium scale exporters. At the same time, such initial public front- loading will create a local market demand, making such services economically viable, which then will gradually lead to a market driven solution.

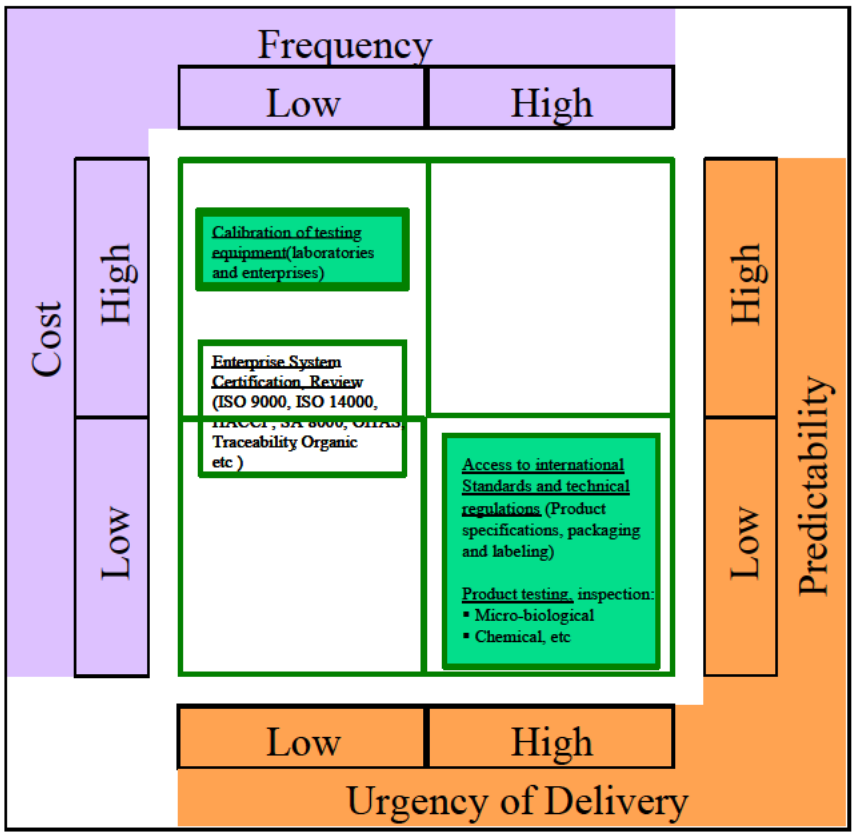
4.3 Clustering of compliance services

In order to guide decision makers on whether, and where, such services should be established, based on viability and sustainability criteria, a closer look at the common characteristics of compliance services can be of help. Compliance services can be viewed from several perspectives: their cost, frequency, predictability and the urgency of delivery. Hence, three clusters of services can be identified (Figure 3):

1. Services, such as calibration, that have a rather high cost, low frequency, high predictability and low urgency, therefore allowing for regional provision if national demand is small;
2. Services, such as standards access, product testing and inspection, that have a rather low cost, high frequency, low predictability and high urgency, for which national provision even in the case of small economies is preferred; and
3. Services, such as enterprise systems certifications, that have a low frequency, are rather predictable and bear rather higher cost, for which provision could be either national or regional, mainly dependant on the number of transactions foreseeable.

This clustering can be useful for making a decision on whether these compliance related services of an enabling business environment for exports and trade development are viable and should be available at the national level, currently or later, or whether they should rather be established at the supra-national level (e.g. sub-regional compliance services, etc.). Such clustering certainly can be further refined taking into account the sizes of countries, their industrial base, and resulting quantitative demand for the various compliance services. Obviously the bigger local demand would be for an individual service, the more a sustainable provision at national level could be envisaged. Such first rough clustering nevertheless is useful to encourage reflection on a possible division of labour between national and regional compliance infrastructures and related services.

Figure 3: Clusters of compliance services

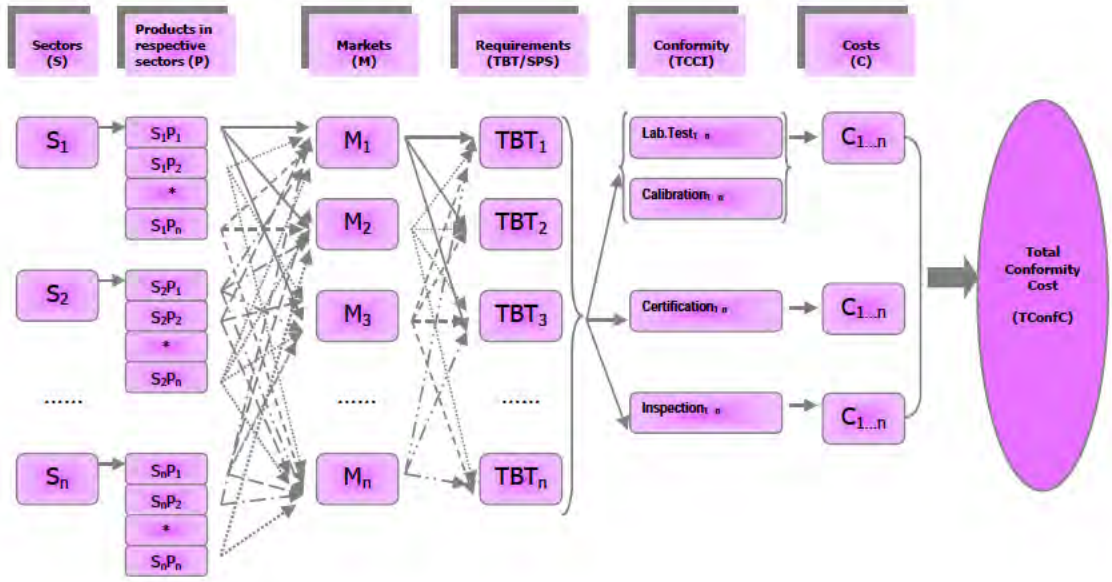


5. Cost/Benefit analysis of establishing compliance infrastructure

Developing a complete SMTQ compliance infrastructure in a developing country is a high cost venture. The question therefore arises how to measure the impact or the cost and benefits of local, internationally recognized compliance infrastructure and services compared to the outsourcing of such services to foreign providers. Such consideration is also of interest to donors and international development agencies, in need of an objective rational whether or how their investments would be justified from a cost/benefit perspective.

Based on past project experiences, UNIDO has done some basic modelling to compare costs and benefits of local versus foreign provision of compliance related services. Based on defining a country's conformity requirements for given products and markets, the total cost of conformity for given or projected trade volumes can be identified and compared using a simple graphical model as presented below (Figure 4):

Figure 4: Defining the Country Conformity Requirements



The first step in mapping-out the infrastructure for compliance required to support the present or potential exports of a country would be to identify the productive sectors of the country together with the range of products manufactured. Thenafter, the markets these products are destined to and their respective TBT/SPS conformity requirements that have to be met in the respective markets are to be determined. Once established, the TBT/SPS conformity requirements for the identified trade volumes will allow the identification of the required number of laboratory product tests and inspections, laboratory equipment calibrations, and enterprise system certifications.

The spectrum of identified tests defines the necessary laboratory infrastructure (calibration, micro-biological, chemical, and other sector-specific testing). Each laboratory category would respond to the identified spectrum of tests and have to dispose of the defined capacity of tests to be conducted. Then depending on the extent of the country export potential, key export sectors, geographic dispersion of export production, the number of laboratories required to satisfy the testing needs can be approximated. Similarly can be proceeded for exporting enterprises' system certification needs.
Based on such identification of required compliance services for given or projected trade volumes, domestic capacity and their (necessarily internationally recognized) services can be compared to the cost of outsourcing of such services. The cost differential provides a clear indication on the pay back period for the establishment and maintenance of local, internationally recognized compliance infrastructure and services.

UNIDO conducted two case studies based on identified products and export markets, and on the resulting specific TBT/SPS requirements. Shrimps and garments exports from Sri Lanka to the EU were analyzed based on TBT and SPS requirements retrieved from the CBI Access Guide database (www.cbi nl).

The results concluded that testing products using domestic developed SMTQ infrastructure for compliance might lead to a cost reduction of about 30-40% in comparison to costs associated with seeking the same services from commercial providers abroad. It is important to mention that costs arising from the time delay in obtaining the results from outsourced testing were not taken in consideration in this calculation. In addition to local compliance capacity development, resulting in a significant reduction of the conformity costs incurred by exporters, such reduced cost of compliance will also lower a key market entry barrier for small and medium potential exporters.

In the analyzed cases of exports of shrimps and garments from Sri Lanka to the EU, the investment in infrastructure and services for compliance could be recovered through the cost of export savings (decreased cost of compliance for product testing and enterprise certification) within the short period of less than three years (see detailed case studies below).

6. Trade infrastructure building: Asian case studies and lessons learned

6.1 SRI LANKA: Reducing cost of exports

Problem:
In the present WTO led globalised market place, Sri Lanka, with an economy of US$ 18.4 billion, has enjoyed strong growth rates in recent years. The economic reforms have brought significant changes in Sri Lanka's economy, which progressed from being mainly agricultural to having a much broader base of industrial production, with a thriving manufacturing sector. Accordingly, the export structure of the country is now based on processed products such as garments and textiles, ceramic, and rubber, while still exporting others, such as seafood, in particular shrimps with little processing.

The changes occurred in the country's export profile brought up numerous opportunities, but also challenges for the Sri Lankan exporters, who were confronted with the challenge of providing internationally recognised product testing certificates for their products. Hence, the strengthening of capacities of Sri Lankan institutions dealing with Standards, Metrology, Testing and Quality (SMTQ), such as the Industrial Technology Institute (ITI) and related bodies, to operate according to accepted international practices became an essential building block within the enabling institutional business environment for private sector and trade development.

TA Provided:
With financial support from NORAD, UNIDO provided support for the development of the country's national infrastructure and services for compliance. Several key areas were identified for assistance in consultation with the Government, and supported under the "*Integrated Industrial Development Support Programme for Sri Lanka*", which commenced in 1999.

In order to upgrade the institutional environment for compliance for the agro-food and textile/garment sectors, five testing laboratories (2 microbiology laboratories at ITI & SLSI, 2 chemical testing laboratories at ITI&SLSI, and 1 textile-testing laboratory at TT&SC) were selected for international accreditation. The accreditation of selected export-relevant priority testing services of these five testing laboratories to the ISO 17025 standard by the Swedish Accreditation Authority (SWEDAC) in 2002 made them the very first ever internationally accredited laboratories in the country.

<u>*Food products:*</u>
The development of the chemical and microbiology laboratories has become a main support to numerous Sri Lankan exporters of agro-based products. Concretely speaking, were thereby targeted the following products, their international market requirements and the respective national institutional compliance support services: tea (testing for pesticide residue) and shrimps (antibiotic residue analysis). As a result of the laboratories' service accreditation and the thereby lowered market entry barrier of proving product compliance, an increased number of SMEs were able to enter export markets: Alpex Marine (Pvt) Ltd. ; Appollo Marine (Pvt) Ltd. ; Aqua Gardens (Pvt) Ltd.; Ceylon Foods (Pvt) Ltd.; Global Sea Foods (Pvt) Ltd. ; Indiwary Aqua (Pvt) Ltd.; Jay Sea Foods (Pvt) Ltd.; J P Products (Pvt) Ltd.; Nuwan Sea Foods (Pvt) Ltd.; Pearl Island (Pvt) Ltd.; Skyway Sea Foods Specialists (Pvt) Ltd.; Southern Fish Factor; Shinwa Lanka Ltd.; Tropic Frozen (Pvt) Ltd.

<u>*Tea:*</u>
A major export of Sri Lanka is tea, and a growing niche market is the "organic tea" segment. Apart from utilizing organic agricultural practices, the exporters must show that the product is free from pesticide residue. Non-availability of the respective testing services constituted a main impediment to trade. The chemical

laboratory accredited under the project is now capable of and internationally recognized for carrying out this type of testing.

Garments:
Sri Lanka has a strong garment sector, manufacturing for international brands. The brand holders requested product testing, which had to be outsourced to foreign, recognized laboratories at high costs. Through the UNIDO/NORAD intervention, the Textile Training and Services Centre (TT&SC) laboratories were upgraded for international accreditation in tests such as colour fastness, shrinkage, band elongation, and fibre composition. In parallel, the Textile Training and Services Centre (TT&SC) was also strengthened to assist the garment industry members, mainly SMEs, in achieving conformity to buyer's requirements[4] through provision of technical assistance.

The formal international recognition (accreditation) of the testing services of the Textile Training & Services Centre (TT&SC) lead to a 27 % increase in local demand for its testing services. Local clients found that by using TT&SC's testing services, testing costs and time required for testing was around 50% cheaper and faster in comparison to overseas testing services. Sri Lankan garment exporters previously had to send their samples either to Singapore, Hong Kong, or the importer's laboratory for testing.

Following acceptance of the laboratory testing by national manufacturers, their international clients and brand owners started slowly to also accept the local internationally accredited testing services. Up to now, local laboratory certificates are being accepted by the following international brand owners: Adams Children Wear, BHS, Boden, Ethel Austin, GAP, Home Base, NEXT, NIKE, Liz Claiborne, Mothercare, Safeway, Sainsbury Group, Tesco, Victoria's Secret, and Woolworths.

The Textile Training & Services Centre (TT&SC) laboratory also became the central piece for marketing regionally the laboratory's additional services, such as training and consultancy. The Centre already trained few trainees from Pakistan and Vietnam on laboratory Quality Systems and test procedures. In addition, several inquiries have been received to carry out training, consultancy work and setting up textile testing laboratories in neighboring countries.

Metrology/calibration:
To ascertain the accuracy of the tests and the testing equipment used by these laboratories, reliable calibration of their testing equipment, as well as precise and measurement services to the industry are required. Earlier, laboratory or enterprise testing equipment had to be regularly sent outside Sri Lanka for recognized and traceable calibration/re-calibration. This often incurred high costs, since in some cases the equipment had to be hand-carried for calibration, using expensive transportation means (air transportation). The project therefore also strengthened the capabilities of the national Industrial Metrology Laboratory at ITI. A total of six metrology laboratories (dimensional, volume, mass, thermometry, pressure and electrical) were upgraded and internationally accredited for their calibration services, hence becoming able to provide locally calibration services equivalent to foreign services.

Enterprise systems management certification:
Exporting textile sector enterprises have to provide to their foreign clients the proof of conformity with environmental management requirements. The project therefore developed local capacity to establish and certify enterprise Environmental Management Systems in accordance to the ISO 14001 standard requirements. Twenty national consultants and twenty national auditors were trained according to international practices, and ten pilot companies were assisted in developing ISO 14001 systems. While international recognition of local systems certification was not yet obtained, the services of an international certification body were utilised to carry out the audits of the pilot enterprises and provided the practical audit training required for the national auditors. Five enterprises were assisted in obtaining certification. As a result of the intervention and the auditor capacity building, SLSI launched the national ISO 14001 certification scheme.

This novel approach to compliance capacity building in Sri Lanka has found recognition as a good practice in the 2004 WTO/OECD Report on trade-related technical assistance.

[4] The testing and certification requirements for garments and textiles cover a variety of areas as described above and also include tests on harmful substances in colouring processes such as azo dyes, other dangerous substances such as flame retardants, asbestos etc., as well as other physical properties of the fabric, strength of the stitch, colour fastness, shrinkage; wear properties and compliance to guidelines on textile/apparel labeling.

Cost/benefit analysis of establishing local compliance infrastructure and services:

For shrimps, based on annual exports of 100,000 tonnes, the total cost of compliance (product testing and enterprise certification) when undertaken outside Sri Lanka amounts on an annual basis to roughly US $ 8.7 million, while local provision (internationally recognized) only amounts to approximately US$ 5.8 million, resulting in an annual gain of US$ 2.9 million, or reduction of cost of exports by about 35%. For the individual exporter, the cost of proof of compliance is roughly reduced from approximately 5% to 2-3% of the total sales value.

For garments, based on 2003 export figures, the provision of local, internationally recognized compliance services resulted in testing cost reductions between 32 and 79 % depending on the test, while enterprise system certification reduced in cost between 45% (for ISO 9001 certification, already with stronger local competition) and 85% (for less established certification against SA 8000, where the foreign certifier still remains in a market dominant position).

These significant gains in compliance costs in both sectors can be compared to a required initial investment of less then US$ 10 million for the establishment of the necessary, internationally recognized, infrastructure for compliance.

The above case studies therefore clearly advocate for the benefits of establishing locally an internationally recognized compliance infrastructure, and indicates that a relatively short and attractive "pay back period" of 3 to 5 years (including recurrent cost of the facilities) is possible, given the existence of a sufficient industrial base or market for such services.

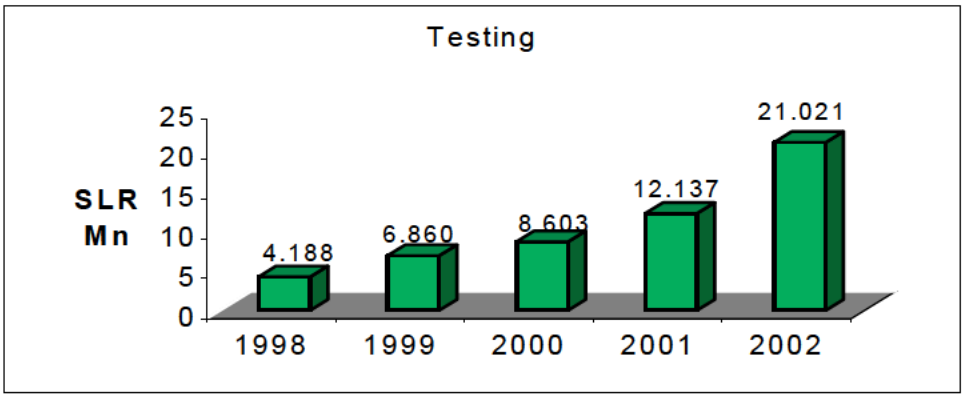
The case would become even stronger if we would quantify the additional effect on small and medium scale enterprises being able to enter export markets due to lower cost of exports, often constituting a market entry barrier, as well as the also not quantified effect on better local consumer protection through more reliable check on locally produced and/or imported products.

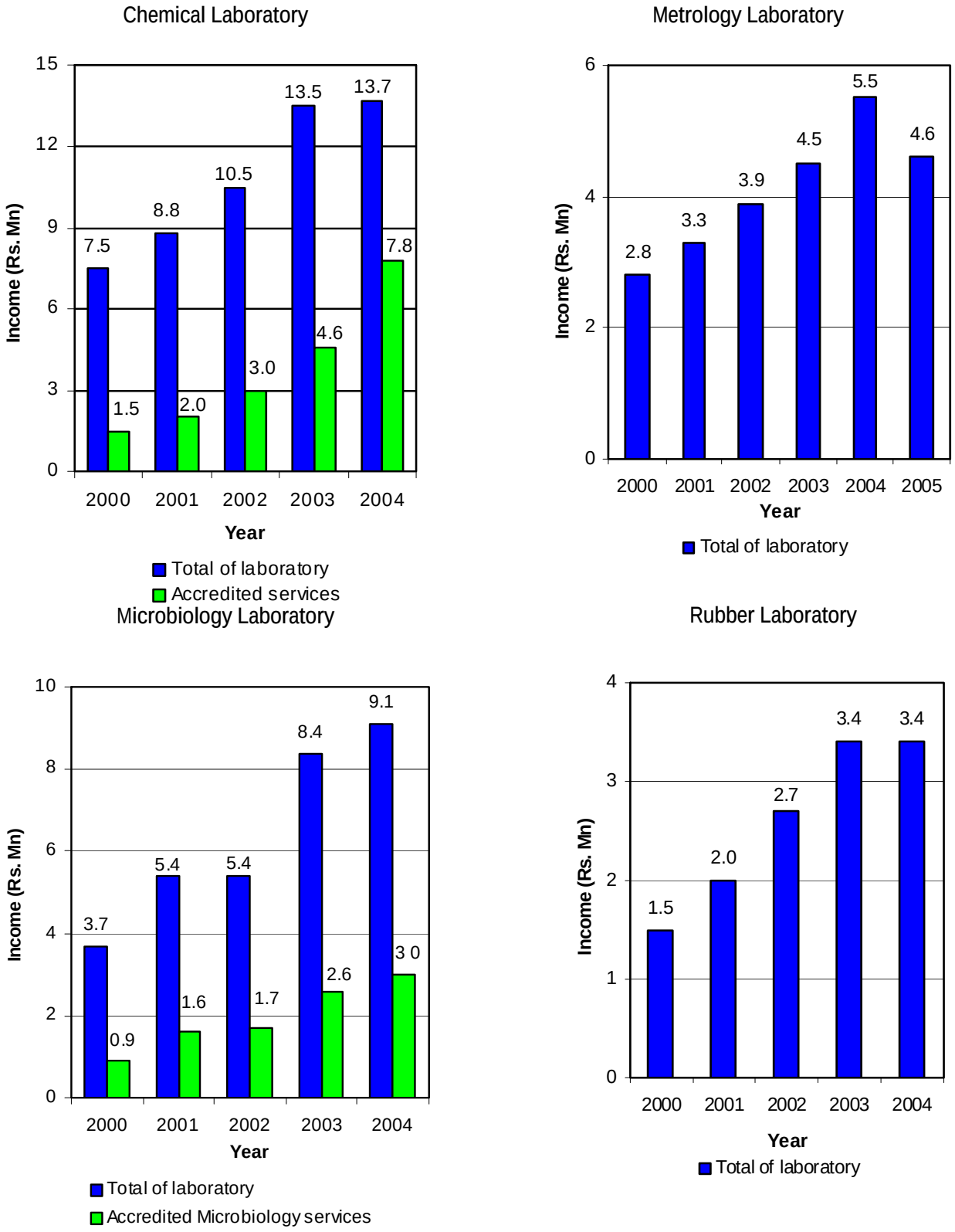
Sustainability of the established compliance infrastructure:

During the lifetime of the NORAD/UNIDO support intervention in Sri Lanka, significant efforts have been made to ensure the sustainability of the institutional capacity developed, and to guarantee the efficiency of service delivery. Within this regard, the project undertook a market survey on testing needs, developed costing of services, decentralization of budgets, corporate planning, incentive schemes and provided assistance in marketing. As a result, the assisted institutes have become model success cases of corporatisation. With testing and services incomes growing rapidly and significantly after accreditation, their reliance on Government funds has been reduced almost totally (80% of institutional budget is derived at present from such accredited services).

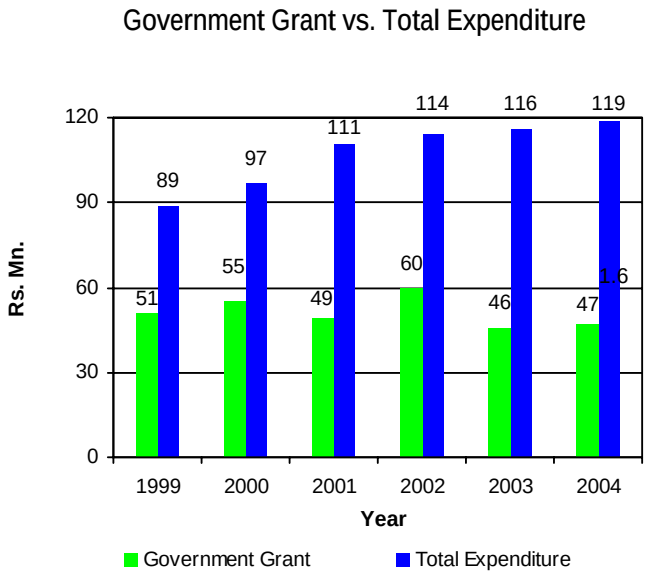
As shown in the graphs below, all laboratories developed/or strengthened in Sri Lanka have gradually shown an increase in the number of samples tested per year, and thereby higher total revenues from testing activities, after obtaining international accreditation. Accredited testing services grew over proportional to non-accredited testing services. As to ITI laboratories, the average demand for accredited tests increased by 62%.

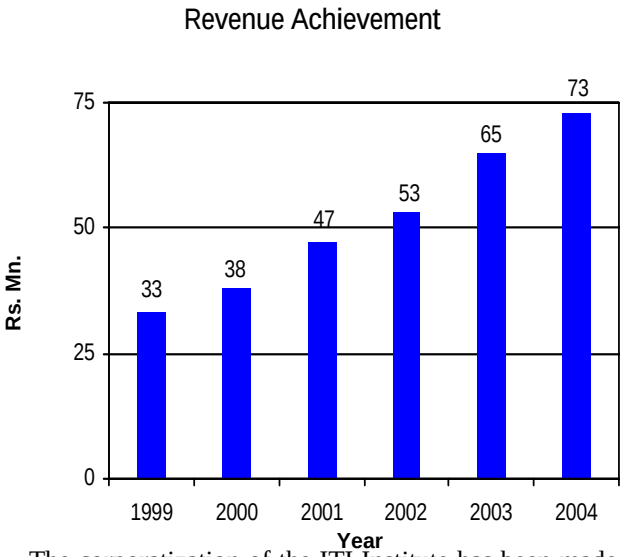
Figure 5: Textile Training & Services Centre – Growth of income from testing services

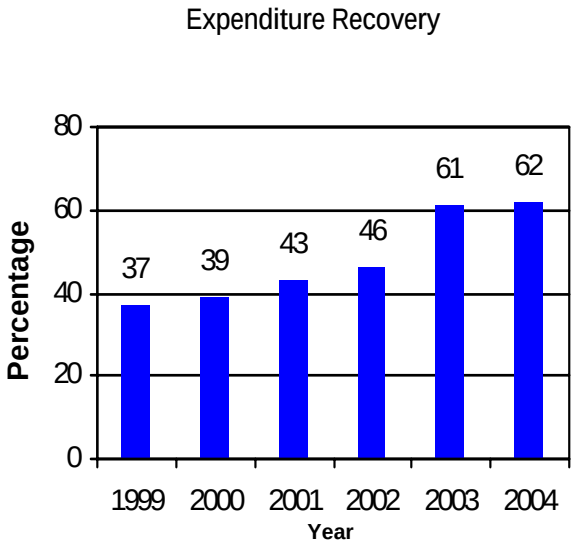




The ITI laboratories were also guided in how to generate the necessary funds to retain the international accreditation status, as well as in developing adequate systems, procedures and an incentive scheme to ensure staff commitment and retention. Furthermore, assistance was provided to enhance corporate governance, corporatization and marketing functions of the ITI institute leading to a sustainable degree of self-financing ability. The success of the ITI in increasing its self-financing ability is indicated in the graphs below. While the overall budget of ITI was growing, and while government grants were reduced, the ITI Institute managed to maintain a steady flow of revenues and recover more than 60% of its expenditures.







The corporatization of the ITI Institute has been made possible by leveraging the self-financing ability concept across the entire organization, linking to performance measures and providing incentives to demonstrate importance of achieving set goals. The ITI institute and the strategy for self-sustainability constitutes a successful good practice example for a market driven government institution acquiring a private sector mind set and a private sector oriented corporate culture.

Lessons learned:

International accreditation of local laboratory services, as part of the institutional enabling environment for compliance for private sector and trade development, can contribute significantly to the reduction of cost of exports, through the reduction of the (private sector) exporter's cost associated with proving compliance to international requirements.

The reduction of about 2-3 % from the total sales value achieved in the case of fisheries/shrimps exports from Sri Lanka to the EU, not only enhances the profit margins of existing exporters, but also facilitates for other potential small and medium size enterprises to venture into exporting, thereby increasing the total number of exporters and indirectly rising labour force and income generated at the national level. In particular, in the case of fisheries/shrimps sector, such enlarged export base has a positive impact on low skilled, poor labour force.

On the other hand, the Sri Lankan case has also clearly shown that international accreditation of national compliance services (testing, calibration and certification) is not on its own already a panacea to buyer recognition and thereby avoiding more expensive and time consuming international compliance services. Here, the profile of the exported product will play a determinant role on how easily foreign partners (foreign public health authorities or foreign enterprises/buyers) can be convinced of the reliability of local compliance services.

In the case of fisheries/shrimps, the challenge was to get testing accepted by foreign public regulatory and inspection authorities (such as EU FVO). The exported product was not branded; such was done later in the importing country. Once the concerned laboratory was accredited internationally for conducting the required tests by an international accreditation body having an ILAC Mutual Recognition Arrangement (MRA), these foreign public authorities automatically recognized the certificates emitted by the laboratory.

In the case of garments, the challenge was different, since ILAC based international accreditation of laboratories did not suffice to automatically gain the acceptance/confidence of the foreign enterprises that produced branded garments locally. Moreover, it has been proven difficult to achieve confidence in the local developed services, especially because these brand owners usually work with specifically designated labs (such as "Marks & Spencer" designated lab).

Hence, in order to achieve the requisite confidence and recognition of foreign enterprises manufacturing garments in Sri Lanka, over a period of more than a year, the accredited laboratories invited the local manufacturers to visit their facilities, in order to build-up their confidence based on the reliability of testing results. The local manufacturers then in turn sensitized the foreign brand owners about the reliability of the laboratory services, convincing them to try these services. It took about another year until some brand owners got persuaded of the reliability of the testing services offered by the Sri Lankan internationally accredited laboratories and the benefits of testing their products locally. After some brand owners got convinced, others followed. Yet, some of them, such as Marks & Spencer, still require testing to be conducted in their own designated labs.

6.2 CAMBODIA: Developing the institutional capacity for WTO Accession

Problem:
Cambodia became a WTO member in October 2004, being the first LDC to join the world trade body. As part of the WTO accession process two Action Plans were developed for the implementation of the TBT and SPS Agreements (see Annex 1&2) and, within others, specific gaps related to the country's capacity to comply with the two WTO agreements were identified. The Action Plan on the TBT Agreement highlighted the need to upgrade in particular the standards, technical regulations, metrology, and conformity assessment capacity, as well as the establishment of a TBT Enquiry Point. Similarly, the Action Plan for the SPS Agreement required the establishment of technical regulations, laboratory testing capacity, including the supply of laboratory equipment, reagents and test kits. However, at the time of accession the required needs were still to be implemented and no technical assistance had been accompanying the accession process.

Technical Assistance (TA) provided:
Austria therefore funded under UNIDO implementation a project to address the TBT/SPS related challenges of developing Cambodia's standards law and metrology law, and of upgrading the country's metrology and testing infrastructure, so that exporters can benefit from trade opportunities made available by the country's WTO accession. Further assistance was provided through an on-going regional NORAD/UNIDO intervention covering Cambodia, Lao PDR and Vietnam. The technical assistance allowed for the drafting of a standards and a metrology law, establishment of both TBT and SPS enquiry points, and for the upgrading of basic testing infrastructure for micro-biological and chemical testing, mainly for food products. A product certification scheme was also established.

Lessons learned:
Cambodia engaged in WTO accession negotiations and became a WTO member without having the proper legal and regulatory framework for the implementation of the WTO agreements in place, which Cambodia was to sign as part of the accession. No technical assistance was sought to accompany the accession process and establish WTO rules' compliance during the accession period. Such required framework was only developed and submitted to legislature after the country's WTO accession. Since international recognition (accreditation) of laboratory testing capabilities usually takes years to come, precious time got lost through a late launching of the upgrading process.

Beneficial WTO accession does not only require a legal and regulatory framework in place, but also relays on local producers and exporters being aware of the Multilateral Trading System (MTS) requirements allowing them the necessary time to adapt their production processes to produce according to international requirements in a competitive manner. Not taking advantage of the lead time of usually years of negotiations deprives the private sector both from active participation and expression of its interest in WTO accession negotiations, and

also from the opportunity to adjust products and production processes, which is a costly and often more time consuming process than the adoption of legal frameworks.

A full capacity to implement TBT/SPS Agreements can produce significant growth of agricultural products exports and hence agro-enterprise sector development. The early obtained ability to test their products locally for microbiological contamination, as well as chemical analysis to ensure the absence of harmful chemical substances, would have offered Cambodian exporting enterprises the chance to better anticipate on and adjust to market requirements, therefore improving their competitive position in international markets.

WTO accession is a domain, where developing countries, and in particular LDCs, almost by definition do not have own experience and can not easily capitalize on experiences from other acceding countries. Donors and international Agencies therefore have a particular responsibility in accompanying such accession processes in an early stage, by raising awareness, informing about the pre-requisites for a successful accession, and including the private sector in the negotiation process. Donors and Agencies thereby could, through technical assistance, lay the grounds for the required business environment and institutional infrastructure.

6.3 PAKISTAN: Establishing Supply Chain Compliance for Fish Exports

Problem:
Pakistan is in the process of diversifying into non-traditional export segments such as fruits and vegetables, meat, and fisheries products, the later representing at present the biggest non traditional export sector, with overall exports of US$ 153 million (2004), with main targeted markets being the EU (US$ 45 million), followed by the US and neighbouring Middle East markets. A EU inspection mission early 2005 revealed important deficiencies in terms of hygiene and quality management along the fisheries supply chain, including at the level of local inspections. Subsequently, in a responsible manner to avoid non compliant exports, the Pakistani authorities self-imposed a ban on exports to the EU.

Technical Assistance (TA) provided:
The European Union (EC) is funding a Euro 2.5 mn. Trade Related Technical Assistance (TRTA) project implemented by UNIDO, which aims at the upgrading of the compliance infrastructure, in particular in the area of standards, conformity assessment (testing, calibration, and accreditation) to assist Pakistan in fostering its integration into the world economy.

The TRTA programme, which had started right before the self-imposed export ban, was therefore able to react immediately to the EU FVO inspection visit and to provide technical assistance within shortest notice. Technical assistance included expertise and other support along the full supply chain, in particular to the upgrading of the Competent Authority (CA) for inspection services, support to the international accreditation of one chemical and one micro-biological laboratories at the Marine Fisheries Department (the Competent Authority), expertise for the upgrading of fisher boats, the modernization of the Karachi fish auction hall, the operations of harbour management and for improvements in hygiene and quality management including traceability at processor level. At the same time, the provided expertise allowed for the mobilization of over US$ 700,000 of local resources for boat upgrading, auction hall renovation, civil work and provision of additional laboratory equipment.

Lessons learned:
The crisis provoked through the external threat, the EU inspection mission, was clearly instrumental to unify local stakeholders and create a receptive environment for technical assistance. The perceived urgency for remedial action was a clear advantage for the coordinated and efficient launch of activities and commitment of all stakeholders.

The fact that a technical assistance programme was already operational, and with the un-bureaucratic agreement of the donor (EU), local stakeholders and UNIDO could shift priority to this particular challenge, allowing for on-time appropriate technical assistance support, which would otherwise have not been possible due to lengthy programme preparation, approval and financing. If a technical assistance programme had only been drawn-up at the moment of the EU FVO inspection, some 9-12 months could have been easily lost before the start of any support to remedy the deficiencies.

Nevertheless, the potential for coordination between regulatory inspection and technical assistance provision is often in many countries not systematically taken advantage of. There is certainly a need to strengthen strategic planning and coordination between donor concerns about safety of food imports into their countries and the strengthening of local infrastructures and services in compliance related issues through technical assistance.

The case also demonstrates that technical assistance needs to follow a logic of supply chain in order to have the desired impact. Scattered assistance, not covering the whole supply chain, will still improve local capabilities, but miss out on the need to systemically improve synergetic and inter-dependant performance of individual actors, and thereby not achieve the desired impact in terms of trade development.

7. Overall lessons from the establishment of compliance infrastructure

The private sector needs to be fully involved in any kind of design and upgrading of the institutional environment for integration into the Multi-lateral Trading System (MTS), in particular within WTO accession and implementation of related WTO agreements, the private sector being the key actor for trade development. In this respect it is crucial to raise awareness with the private sector about WTO agreements and their implications within a public/private sector dialogue in an early stage of WTO accession negotiation and beyond.

Too often the establishment of compliance infrastructure is regarded as public sector domain and the private sector is reduced to the role of target beneficiary, or recipient. But meaningful upgrading of compliance infrastructure (in standardization, product testing, inspection, accreditation, etc.) needs the private sector as a key partner in order to ensure full relevance to the trade development strategy, activities and product potentials, which are private sector lead.

Also, successful upgrading of business environment, such as for compliance issues, through trade-related technical assistance can only be provided if narrow, agency mandate focused approaches are overcome and inter-agency holistic trade capacity building efforts are deployed. Trade capacity building in the sense of building-up viable institutional infrastructures and services, mainly in LDCs can not be undertaken without a regional perspective, allowing for division of labour and sharing of resources in a way that will remain economically viable after the completion of the technical assistance programmes. A regional dimension of technical assistance programmes, apart of creating regional coherence and harmonization, also leads to more cost effective donor and agency interventions.

Significant attention needs to be given to the support of such infrastructures in identifying and implementation of self-sustainable, private sector oriented business strategies, making them to the extend possible less vulnerable to public grant and subsidies and enable them at the same time to retain their technically skilled staff on the basis of market oriented salaries and incentive schemes. To the extend possible, compliance services should be market based and market provided. As to public sector concerns, such as food safety, consumer protection, they should not lead to parallel public sector services, but rather be used to kick-start the establishment of local reliable compliance services, which could be contracted by the public sector and therefore be made more economically viable.

At the same time, while international buyers dominate global trade relations with private, unilaterally set standards, (public) compliance infrastructures have to be prepared to play a role in facilitating access to, compliance and proof of compliance with such private standards.

8. Conclusions and Outlook

Despite numerous initiatives, most developing countries are still only getting a marginal share of the exponentially increased international trade. Lack of competitive supply capacities and the lack of internationally recognized infrastructure and services for compliance are an important part of the problem that needs to be addressed. In addition, many developing countries are ill equipped to implement the rules set by the Multi-lateral Trading System as regulated by the WTO Technical Barriers for Trade and Sanitary and Phyto-Sanitary agreements, which on one side protect consumers health safety and environmental interest, but on the other side create market entry barriers if compliance and/or recognized proof of such compliance is not ensured.

The building-up of trade-related institutional infrastructures, in particular in the area of supply-side development and the strengthening of standards and compliance infrastructure and services has received un-preceded attention in the last years, and in particular through the recent G8 Aid for Trade Initiative. This constitutes a welcomed opportunity to revisit present approaches to trade-related technical assistance as proposed so far by a multitude of donors and technical assistance providers. We therefore face today an opportunity to further enhance coherence between the various, most of the time complementary services provided, and to significantly increase their impact on trade development. The envisaged increase of trade related donor interventions calls for optimizing technical assistance delivery through fully integrated approaches, highlighting their cost/benefit rational and being built on complementary inter-agency service delivery.

While many developing countries are in the process of building-up their TBT and SPS compliance infrastructures and services, the evolving international trade relations and the growing significance of international private buyers, such as supermarket chain, dominating more and more global trade through their sourcing strategies, poses already the next challenge for potentially exporting enterprises. Private standards set by these buyers are usually set unilaterally, and are more stringent than consensus based negotiated international standards, being also adversely to ISO or CODEX standards not publicly accessible. Meeting such private standards, be this company standards or standards set by groups of buyers such as retailer consortia (BRC, EUREPGAP), entails significantly higher cost for enterprises, both for establishing and proving compliance.

Development partners, both donors and technical agencies should see in private standards a potential area for facilitating a private-public-private dialogue. A non-ability of the public sector and of official (public) development assistance to assist developing countries in the provision of institutional responses to this “private” challenge would mean for a large number of mainly small and medium size exporters a de facto exclusion from global supply chains and trade relations.

On the other hand, such private-public-private partnerships, as a public good which the private sectors on their own would not easily be able to provide, would foster true private sector participation in the design and implementation of trade development and trade capacity building.

Ultimately, private sector development and trade development would be recognized as being two sides of the same coin, both only achievable if the institutional environment for their respective development is designed and enhanced in full cooperation with the private sector, the main actor in developing productive capacities and trade.

Official development assistance and donor support could play a major role in providing a public good to serve and stimulate private-public-private trade development, and through such increased trade make a significant contribution to local economic development and wealth creation.

Annex 1

WORLD TRADE ORGANIZATION

RESTRICTED

WT/ACC/KHM/14/Rev.1
3 March 2003

(03-1220)

Working Party on the Accession of Cambodia

Original: English

ACCESSION OF CAMBODIA

Action Plan for the Implementation of the TBT Agreement

Revision

The Government of the Kingdom of Cambodia has submitted the following revised Action Plan for the Implementation of the TBT Agreement by Cambodia, with the request that it be circulated to the Working Party.

Action Plan on TBT Agreement

Year	Step/ measure/ activity	Technical Assistance (Provided) or Sought
1999/ 2001	**Activities undertaken** - Sub-Decree on Industrial Standards of Cambodia was approved and signed on 15 May 2001. - Ministry of Industry Notice on Registration of Industrial Products being implemented. - Developing TBT and Standards Library at the Department of Industrial Standards of Cambodia.	No TA provided.
2002	**Activities undertaken** - Drafting the new Law on Industrial Standards of Cambodia. - Revise the Ministry's Notice on Registration of Industrial Products. - Submitting the draft Sub-Decree on Metrology to the Council of Ministers for adoption. - Drafting Technical Regulations on (1) the procedures and application forms for using standards; (2) procedures for using standards marks; (3) size of standards marks; (4) certificate and license forms; (5) form of auditing and assessment; (6) form of pre-assessment and market survey; (7) form of receipt for payment of services; (8) form of testing and calibration reports; (9) request form for testing and calibration.	No TA provided.
2003	**Activities to be developed** - Final draft of the new Law on Industrial Standards of Cambodia and its approval by the National Assembly. - (10) Procedures for accessing information and publication; (11) Working procedures of Industrial Standards Technical Committee; (12) Declaration on amended or revised standards; (13) Procedures and Guidelines for Declaration of mandatory standards marks; (15) Procedures for preparation and adoption of standards; (16) Procedures for sampling, verification, testing, inspection and evaluation of conformity in processing establishments, including registration and accreditation; (17) Procedures for urgent notifications on dangerous products; (18) Procedures for recognition and acceptance of foreign testing certificate and calibration; (19) Procedures for recognition of foreign inspection, certification and accreditation bodies; (20) Procedures for adoption or application of foreign technical regulations. - Setting up a road map for standards and conformity infrastructure. - Capacity building for key standards personnel in the field of standardization and management, method and procedures for sampling and inspection. - Developing TBT and standards library, and train a TBT and standards librarian. - Submit the Law on Industrial Standards of Cambodia to the Council of Ministers for adoption and to the parliament for ratification. - Adopt the Sub-Decree and Regulations for implementation the Law. - Capacity building for key standard personnel in the field of	- Legal expert specialized in standards and WTO/TBT requirements. - Short-term metrology expert. - Long-term standards experts, including those specialized in WTO/TBT Agreement and requirements. - Short term and long term training on standards, management systems, certification system, accreditation, testing and assessment, especially items 12, 16, 17, 18, 19 and 20 (in the left column). - Short-term expert on standards and conformity assessment as specified under item 16 (in the left column). - Provisions of materials and equipment related to the management of TBT activities and

Year	Step/ measure/ activity	Technical Assistance (Provided) or Sought
	standards, auditing, inspection and surveillance. - Capacity building for auditors, assessors and inspectors, and staff responsible for issuing certificate or license, and strengthen the capacity of staff responsible for testing and calibration. - Establish the Office of Enquiry Point on TBT in: - Department of Industrial Standards of Cambodia (ISC) - Ministry of Industry, Mines and Energy - #45, Norodom Blvd. Phnom Penh, - Cambodia. - Fax: 855-23-216086 - E-mail: discinfo@camnet.com.kh - Establishing under the Department of ISC the Office responsible for identifying and providing notifications to the WTO Secretariat under the TBT Agreement. - Publishing under the Department of ISC the Standards Bulletin that covers all activities relating to the Technical Regulations, Standards and Conformity Assessment Procedures. - Installation of testing and calibration equipment in laboratories.	Standards library. - Long-term expert on standards law specialized in the area of WTO/TBT Agreement and requirements. - Short term and long term training for auditors, assessors, certification bodies, testing body. - Legal experts to assist in drafting the Sub-decree and Regulations for implementation of the Law on Industrial Standards of Cambodia. - Provision of electro-technical and mechanical testing equipment.
2004	- Draft technical regulations on safety of chemical products, electrical products and toys. - Train standard staff in the field of international trade and TBT implementation.	- Long-term standards experts. - ST and LT training programs in the field of TBT and TBT enquiry point.
2005	- Readjustment of technical regulations, standards and procedures in accordance with new scientific discoveries and approaches. - Strengthening capacity of standards personnel.	- Long term standards experts
2006	- Readjustment of technical regulations, standards and procedures in accordance with new scientific discoveries and approaches. - Strengthening capacity of standards personnel.	- Long-term standards experts.

Note: The Action Plan was developed in coordination by:

- Department of Industrial Standards of Cambodia, Ministry of Industry, Mines and Energy (coordinator);
- Ministry of Commerce.

Note: This transition strategy may be adjusted depending on the results and successes of the transition plan implementation.

Preparation of Legislation/Technical Regulations for Completing Implementation of the TBT Agreement

Description	2002	2003	2004	2005	2006
Law on Industrial Standard of Cambodia	Draft	Final Draft/Expected approval			
Sub-Decree on Metrology	Draft	Final Draft/Expected approval			
Preparation and adoption of the following regulations: procedures and application forms for using standards; procedures for using standard marks; size of standards marks; certificate and license forms; form of auditing and assessment; form of pre-assessment and market survey; form of receipt for payment of services; form of testing and calibration reports; request form for testing and calibration;	Draft	Approval and Implementation	Implementation	Implementation	Completing implementation of the TBT Agreement
Preparation and adoption of the following regulations: Procedures for accessing information and publication; Working procedures of Industrial Standards Technical Committee; Declaration of amended or revised standards; Procedures and Guidelines for Declaration of mandatory standards marks; Procedures for preparation and adoption of standards; Procedures for sampling, verification, testing, inspection and evaluation of conformity in processing establishments, including registration and accreditation; Procedures for urgent notifications on dangerous products; Procedures for recognition and acceptance of foreign testing certificates and calibration; Procedures for adoption or applying foreign technical regulations; Technical regulations on safety of chemical products, electrical products and toys.		Draft	Expected Approval and Implementation	Implementation	Completing implementation of the TBT Agreement

Annex 2

WORLD TRADE ORGANIZATION

RESTRICTED

WT/ACC/KHM/15/Rev.1
3 March 2003

(03-1221)

Working Party on the Accession of Cambodia

Original: English

ACCESSION OF CAMBODIA

Action Plan for the Implementation of the SPS Agreement

Revision

The Government of the Kingdom of Cambodia has submitted the following revised Action Plan for the Implementation of the SPS Agreement by Cambodia, with the request that it be circulated to the Working Party.

Action Plan on SPS Agreement

Year	Steps/ Measures/ Activities	Technical Assistance Provided or Sought
Prior and 2001	- Sub-decree No. 54 dated 22 September 1997 on the delegation of responsibilities among other tasks to ensure product quality and safety including food products. - Prakas No. 12 dated 13 January 1998 on the Appointment of the role of ensuring food safety including food control at the import-export level and related frauds. - Prakas No. 329 MOC/M99 on pre-packed food labeling. - Sub-decree No. 5 dated 3 February 1998 on the establishment of the Inter-ministerial Committee for coordinating the control of quality and safety of products and services. - Law on the Management of Quality and Safety of Products and Services (promulgated by Reach Kram No. NS/RKM/0600/001 dated 21 June 2000). - Sub-decree No. 28 dated 9 March 2001 on the establishment of the National Codex Committee (NCC) and its Secretariat. - Prakas No. 357/MOC dated 31 December 2001 on the establishment of the Technical Working Groups (TWG) for the National Codex Committee.	- Food Safety regulations (technical assistance provided by FAO, France, New Zealand). - Food Standards (technical assistance provided by FAO).
	- Improvement of understanding of WTO rules and SPS agreement jointly in the inter ministerial committee	- UNCTAD provided assistance in the preparation of the ACC/4 and ACC/8.
2002	- Strengthening the implementation of Codex Alimentarius by means of: (i) holding regular meetings of the NCC and TWGs; (ii) establishing Codex Unit in every ministry concerned to provide effective inputs and proactive participation to the Codex works; and (iii) developing and updating the Codex Library. - Improvement of the operation of the chemical and microbiological food analysis laboratory at Camcontrol Department.	- The European Union pledged TA in 2001, but not yet implemented.

Year	Steps/ Measures/ Activities	Technical Assistance Provided or Sought
	- Revision of existing regulations Sub-decree No. 14 (1988) on Animal Sanitary and Sub-decree No. 98 (1983) on Phytosanitary to ensure compliance with the SPS Agreement.	- Ad-hoc expertise on animal quarantine and plant quarantine was provided by international experts under the WB Agriculture Productivity Improvement Project (APIP).

Year	Steps/ Measures/ Activities	Technical Assistance Provided or Sought
2003	- Operation of SPS Enquiry Point: training of personnel, procurement of necessary equipment.	-
	- Drafting registration procedures and implementation of registration for cosmetic products.	- Expert on drafting regulations on cosmetic registration. - Expert on laboratory for pharmaceutical analysis.
	- Capacity building for key Camcontrol, MAFF and MoH personnel on the implementation of the above regulations.	- ST or LT training programs, including overseas familiarization missions. - Laboratory equipment and reagents for food analysis, plant pest and animal microbiological analysis. - provision of rapid testing kits for a food quality, plant pest and pathogenic materials assessment.

Year	Steps/ Measures/ Activities	Technical Assistance Provided or Sought
2004	- Drafting Regulations on Safety Requirements for Drinking Water and Natural Mineral Water.	- Expert on chemical analysis of food products.
2005	- Drafting Regulations for Nutrition and Food for Special Dietary Uses. - Drafting Regulations on Safety Requirements for Fresh Milk and Processed Milk Products. - Drafting Regulations on Safety Requirement for Frozen Food. - Capacity building for key Camcontrol, NCC, and TWGs personnel on the implementation of the above regulations. - Updating the Codex Library.	- Expert on chemical analysis of food products. - Expert on microbiological analysis of food products. - Expert on law enforcement. - Technical and legal experts on food products and food standards. - ST or LT training programs, including overseas familiarization missions. - Laboratory equipment and reagents for food analysis, plant pest and animal microbiological analysis. - Provision of rapid testing kits for a food quality, plant pest and pathogenic materials assessment.

Year	Steps/ Measures/ Activities	Technical Assistance Provided or Sought
2006/	- Readjustment of technical regulations, standards and procedures in accordance with new scientific discoveries and approaches.	- Expert on chemical analysis of food products.

Note: The Action Plan was developed in coordination by:

- Import/Export Inspection and Fraud Repression Department, Ministry of Commerce (Secretariat of the National Codex Committee);
- Department of Animal Health and Production, Department of Agronomy and Agricultural Land Improvement, Ministry of Agriculture, Forestry and Fisheries;
- Ministry of Health.

Note: This transition strategy may be adjusted depending on the results and successes of the transition plan implementation.

Preparation of Legislation/Technical Regulations for Completing Implementation of the SPS Agreement					
Description	Prior and 2002	2003	2004	2005	2006/2007
Law on the Management of Quality and Safety of Product and Service	Adopted (June 2000)				
Sub-decree No. 54, 05, 28	Adopted (1997, 1998, 2001).				
Revised Sub-decrees Animal and Plant Quarantine	Drafts prepared	Submission to the CM for approval			
Prakas No. 12, 329, 357, 131	Adopted (1998, 1999, 2001, 2002)				
Drafting/adoption of specific regulations (Sub-decrees), as specified in the Action Plan		X	X	X	
Completing implementation of the SPS Agreement					X

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