Development of trade in Africa

– Promoting exports through quality and product safety

Norad

Sida

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Foreword

Sida and Norad have commissioned this report. The report reflects issues of relevance to the policies and practices of these organisations. However, the report expresses the views and findings of its authors.

Increased trade and closer economic co-operation between developing countries represent a considerable potential for development, but realising this potential represents a major challenge. The developing countries still have a disproportional small share of the world's trade in goods and services. Improvement of this situation is dependent on access to markets and the countries' ability to exploit the export potential. In order to obtain market access, the African countries need a quality and product safety infrastructure that complies with international markets' requirements.

This will require national reforms, development of the necessary infrastructure including accreditation – and standardisation bodies and laboratories, training of manpower and targeted development assistance.

Trade facilitation in partner countries is playing an increasing role in private sector development work and the focus is on reducing barriers of trade. Most of our partner countries lack internationally accepted and approved institutions to assure trading partners that the exported goods meet required quality standards and this represents an effective barrier for trade to the regional- and international markets.

This study co-funded by Sida and Norad raises interesting questions within the field of SPS/TBT and will be central in the day to day work with trade related projects.

This study reveals several areas of possible co-operation like co-financing of projects in our common partner countries as well as exchange of knowledge and information.

Sida Norad

Content

1. Executive Summary

Effects of globalisation

Globalisation is one of the most important factors in international development today. One prominent feature is the development of international supply chains, which aim at satisfying the increasingly sophisticated requirements of the industrialised part of the world.

One of the results of globalisation has been increasingly strong growth in international trade. Developing countries have taken part in this development. Africa, however, has lagged behind and Africa's share of world trade has declined year by year. Foreign direct investments in Africa are also low.

It is now generally recognised that there is a strong link between poverty, development and trade. Development of the private sector and trade, and the removal of barriers to trade, play a prominent role in *The New Partnership for Africa's Development (NEPAD)*. UNCTAD, in its latest *Least Developed Country Report 2002*, states that the incidence of extreme poverty is highest in those LDCs that are dependent on primary commodity exports. Most of the countries in Sub-Saharan Africa belong to this category.

At the same time, there is a major, but currently underestimated, opportunity for the rapid reduction of extreme poverty, through sustained economic growth based on the development of international trade. This requires the introduction of development-oriented

poverty reduction strategies in which private entrepreneurship and development play a major part.

One important reason why developing countries in Africa have only been able to benefit from the positive effects of global trade to a small extent, are the non-tariff barriers. Tariffs and quota restrictions have gradually been removed, but technical and sanitary/phytosanitary requirements (TBT/SPS for short) remain important barriers to trade. A quality and product safety infrastructure is needed that complies with these requirements and at the same time supplies attractive products. In order to obtain market access, suppliers have to be able to document compliance. Many developing countries are ill equipped in this respect.

There is still dramatic tariff escalation on many of the processed African agricultural products. Current tariff rates for some sorts of jams and preserved fruit are 200 – 600%! Without such rates, there would have been many more factories in Africa producing for export to the EU. The work to reduce tariff rates, notably for processed agricultural products, has to continue.

The strategy project for promotion of exports

The Swedish and Norwegian governments have responded to the needs of developing countries by emphasising development of trade in their donor policies. In January 2002, Sida launched a strategy-planning project in order to co-ordinate Swedish efforts. In July 2002, the Norwegian Development Co-operation Agency, Norad, joined the project.

The project *Trade – an opportunity for reducing poverty in Africa* sets out a strategy for a co-operation programme with the countries of Africa to promote economic development and trade, while at the same time ensuring safe products in domestic markets. The purpose of the project is to devise a strategic development plan with particular emphasis on *Technical Barriers to Trade (TBT), Sanitary and Phytosanitary Measures (SPS)* and other quality and product safety issues. Sida will make the report available to other donors and interested parties.

The report comprises this Volume 1 plus a separate Volume 2 of annexes. The report describes the position

of Africa in international trade and goes on to outline a set of strategies for an international development programme. Specific recommendations are made for each element at the African level and the international level.

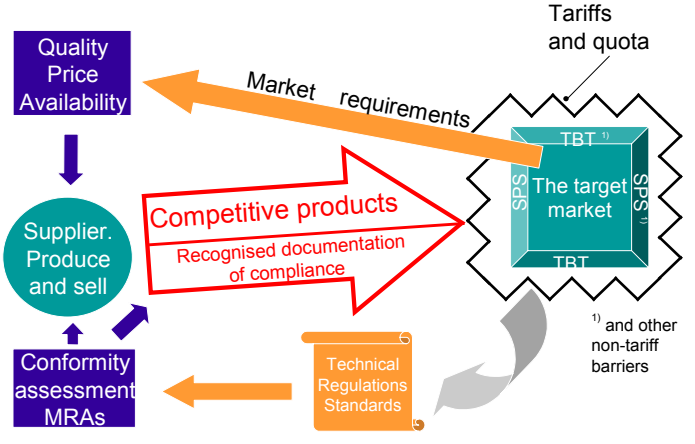
Africa in the global trading system

Chapter 5 of the report outlines the international trade regime and Africa's place in this regime. Traditionally, Europe is Africa's most important trade partner, but intra-African trade is now increasing rapidly. Several important regional groupings have been established over the last 10 years, e.g. COMESA, SADC, UEMOA, ECOWAS and recently the African Union (AU). These organisations are expected to gain in importance in the future.

Strategies for export

Three basic strategies for export are established in Chapter 6. These are:

- The *Just-in-Time Export Strategy*
- Targeted export strategies (with respect to markets)
- Ensuring safe products in domestic markets



The Just-in-Time Export Strategy

The case studies in the project have demonstrated that the *Just-in-Time Export Strategy* is essential for success. The strategy is described with reference to the figure below.

Development of exports is a matter of business development. It has to start with the supplier, who produces and sells his product. The product has to be competitive in the target market with respect to quality, availability and price. While price and availability were previously more important, globalisation has resulted in a stronger focus on quality, including product safety.

The products target a market. Tariffs and quotas, which were traditionally important barriers, have now been reduced. But technical barriers, such as requirements in respect of safety, health and the environment, are growing in number and complexity.

Compliance with TBT and SPS requirements has to be documented in order to gain market access. The requirements are normally given in regulations and standards. Test reports, certificates, and other types of documents of compliance have to be issued by an internationally recognised institution. Mutual recognition agreements (MRA), or other arrangements for gaining recognition, are developed between countries.

In addition to public requirements, potential customers have their own requirements in respect of product quality, packaging, delivery etc. The exporter needs intimate knowledge of customer requirements in the target market in order to propose saleable products.

All these elements are necessary for the development of a successful export business, and they must all be in place at the same time: thus the term *Just-in-Time Export Strategy*. The TBT/SPS infrastructure has to be adapted to the export products in question.

Targeted export strategies refers to the need to be specific. Each product group has to be aimed at a specific market, which may be traditional African markets, emerging markets in the Middle East, India etc., or the demanding markets of the industrial countries.

When international markets are opened up and barriers to trade are lowered, there is also a need to

ensure safe products in domestic markets. There are many examples, including cases from Africa, where inferior or even hazardous products have been dumped on markets where legitimate protective measures have not been sufficiently developed.

The present situation with respect to quality and product safety in Africa

The present situation with respect to exports, quality and product safety in Africa is described in Chapter 7. Agriculture and, to some extent, fisheries, are by far the most important economic sectors in all the countries of Sub-Saharan Africa. The sectors often account for 30–45% of GDP, 60–85% of the work force, and have by far the greatest potential for growth in export markets. Agricultural products account for 35–40% of the exports.

There are many constraints to the development of trade and exports in Africa. The principal ones are:

- Difficulties in complying with TBT and SPS measures
- Unfavourable or discriminating trading terms which constitute obstacles to market access
- Gaps and delays in the logistics chain
- Lack of precise market information and communication
- No clear national objectives and supportive government policies
- Bureaucracy in import licensing and border-crossing procedures
- The strategy does not comply with the *Just-in-Time Export Strategy*

Quality awareness and the general quality of domestic products in most African countries are traditionally low. The population is used to low quality products from domestic suppliers, and the suppliers get away with it. This will not be good enough for the more demanding export markets. A considerable strengthening of focus is required in order to meet requirements in demanding markets.

Process quality is also low. This is reflected in low productivity, high scrap rates in industry, and large post-harvest losses in agriculture (30–50% of the total crop). Processes are slow, resulting in unreliable deliveries and long delivery times.

In spite of the gloomy picture described above, there are encouraging examples of successful African export businesses. A few examples are described in Appendix 1. Without exception, these have satisfied the principles of the *Just-in-Time Export Strategy*. The cases may serve as role models for others.

The TBT infrastructure

The TBT infrastructure consists of institutions for standardisation and conformity assessment. Legislation in the TBT area is highly diverse in Africa. The lack of a harmonised approach is a serious barrier to trade. Much of the legislation is old, often based on legal practices in the former colonies, and may date back to the 1950s or even earlier. Recent additions are often *ad hoc*, and there may be overlapping or inconsistent legislation, or important gaps.

In Africa, 14 countries (out of a total of 53) are full members of the International Organisation for Standardisation, ISO. This is a good indication that they have a good national standardisation body. Another 16 countries are associate or corresponding members of ISO. South Africa has a very large and strong standardisation body, SABS. The national standardisation bodies are often a focal point not only for standards, but also for quality development in general.

Several sectors of conformity assessment are addressed in Section 7.3. These are: metrology, laboratory testing, product certification, management system certification (ISO 9000, ISO 14000 and HACCP) and accreditation. In general, there are substantial deficiencies in the TBT infrastructure, and large differences between countries. Very few institutions have been accredited, which is an important condition for international recognition of test reports, certificates, etc. Several important development programmes are being implemented, see Section 7.3.

The SPS infrastructure

Existing resources in the SPS area are scarce and scattered. Most African countries lack a SPS policy that takes into account the risk-based and multi-disciplinary aspects of food safety and other SPS issues. Co-operation and co-ordination between the many ministries, agencies and other stakeholders involved in this area are absent, with no holistic, integrated approach, resulting in duplication or triplication of effort, the waste of scarce public funds, conflicting interests and disorientation of the many stakeholders. There are also problems in relation to who is the *Competent Authority* (CA) – an essential element in the administrative structure. Trade partners will never accept unclear lines of command. Most countries are members of at least two of the three important international standardisation bodies: Codex, OIE and IPPC.

African countries do not take an active part in the development of international standards, with the exception of South Africa. Standards in the SPS area for agricultural and agro-industrial products – including animal and plant health matters – are of principal concern to African countries. Participation in this form of standardisation ought to be a priority. Several regional standardisation development projects and organisations in Africa are described in Section 7.5.

The specific challenges and objectives of the development programme are described in Chapter 8. As far as possible, specific objectives are linked to NEPAD.

International development programme

Part II of the report (Chapter 9–15) describes the proposed development programme. It starts with awareness building. Change will not take place unless stakeholders acknowledge the need for change. And change is required in order to develop trade in Africa. Awareness is also required of the mechanisms of change – how to proceed in order to achieve results. The stakeholders to be mobilised include:

- The private sector business community
- Politicians
- Public authorities
- Institutions of the TBT/SPS infrastructure
- Consumers

There are many ways of creating awareness. The report addresses two in particular: national awareness programmes, and national focal points for quality and product safety.

Developing competitive suppliers
Chapter 10 addresses business development in general and focuses on quality as a competitive strategy for business development. This chapter is directed towards stakeholders in the private sector. The methods recommended for business development are well-proven tools for strategy development.

The quality management strategies are also well tested and recognised tools and include: Market focused product development, quality and product safety process control, systems for continuous improvement, management systems (ISO 9000, ISO 14000 and HACCP), benchmarking, excellence and quality awards.

Legislative strategies for quality and product safety
For the quality and product safety infrastructure, Chapter 10, a number of general strategies are proposed:

1. Regulate only when risks are significant
2. Limit national legislation and regulations, make use of international standards
3. Balance regulation and enforcement
4. Simplify conformity assessment procedures
5. Simplify the organisation
6. Ensure transparency in order to avoid corruption

The report further introduces *The Leapfrog Strategy*. With the dismal situation in many countries, there is a need for a new deal, rather than mending the old systems. This is particularly evident when the need for international harmonisation to facilitate trade is taken into account.

A general legislative framework comprises a number of legal acts: weights and measures, metrology, standardisation, product safety, product liability, conformity assessment; and in the SPS area: food safety, animal disease, pest and plant protection.

In the further regulation of specific business sectors, there is a need for a model that facilitates international trade. The report highlights *The International Model for Regulatory Harmonisation* developed by the UN Economic Commission for Europe (UN/ECE), which is particularly suitable for regional harmonisation. At the core of this model is the concept of *Common Regulatory Objectives (CROs)*. The countries taking part in the process define CROs jointly. For each product area in question, the CROs will address legitimate concerns of governments, for instance those related to public health, safety and protection of the environment. CROs shall not create unnecessary obstacles to international trade.

The CROs shall contain a provision that products complying with the referenced international, or other agreed standards, are presumed to comply with the requirements. This is the *Reference to Standards Principle*. By citing a statement of this type, the standards remain voluntary, which is in line with the WTO/TBT agreement.

Conformity assessment, or enforcement, is also addressed in Section 11.1, including border control inspection, market surveillance and legal metrology. There is an international trend towards greater dependence on *Internal Control* (control exercised by the supplier) than what was earlier the case. This is sometimes linked to requirements for a management system for control of the organisation's activities and results, such as ISO 9000 or HACCP. System control replaces to some extent product control in the form of testing and inspection. *Supplier's Declaration of Conformity* is encouraged.

The TBT infrastructure

The TBT infrastructure is addressed in Section 11.2. This comprises general and sector legislation (as outlined above), voluntary standardisation, conformity assessment and information services through the WTO/TBT enquiry point. All these elements need to be developed, with particular reference to the needs of export industries.

Standardisation can be developed in stages, and the report recommends a structure proposed by SADC's committee on standardisation. Internationally, voluntary

standardisation is based on principles such as transparency, openness, impartiality and consensus. These principles should also be used in Africa. National standardisation bodies should be independent of government; the private sector should be encouraged to take part and there should be a distinction between standards and technical regulations as laid down in the WTO/TBT agreement.

The SPS infrastructure

Most African countries are facing great challenges in order to develop and implement a SPS policy that will allow them to participate in international trade with agricultural and fishery products. This policy should define the goals and strategies of the national SPS system, including the ways in which the government intends to exercise authority and control over the private sector in the SPS area.

The SPS policy should be based on risk analysis and the food chain approach. These principles are now being implemented in industrial countries and will be a requirement for imports, but are still new to African countries. All three SPS sectors (food safety, animal and plant health) are integrated and measures are based on risk analysis.

A more effective enforcement system is needed, comprising one central SPS authority with the overall responsibility for all technical activities and with one co-ordinated set of local inspectorates, both of them with co-ordinated laboratory and scientific support. The inspectorates should be responsible for all enforcement activities related to production and distribution.

Three stakeholder groups are important in SPS issues. *Politicians* are responsible for establishing the SPS policy and developing efficient organisations. The *private sector* is responsible for establishing and maintaining internal control systems in line with the food chain approach, usually in the form of HACCP systems. *Consumers* have a right to know and should participate in the process of determining acceptable risk levels.

All countries should establish WTO/TBT and SPS enquiry points in order to (1) notify WTO of *new* regula-

tions and conformity assessment procedures, including drafts, and (2) provide information to interested parties about *all* regulations, standards and conformity assessment procedures.

Supporting the quality and product safety infrastructure
In addition to the basic TBT/SPS infrastructure described above, there is a need for a network of institutions or companies, which play a supporting role. These institutions may be part of the private or public sector. There is an international trend towards privatisation of such institutions. The following functions need to be provided:

- Scientific support for risk assessment in the SPS area
- Industrial metrology in order to provide traceability and accurate measurements
- Testing laboratories (chemistry, microbiology, materials, specialised labs. for exports)
- Product certification
- Management system certification (ISO 9000, ISO 14000, HACCP)
- Accreditation

The main point is to provide access to services, not to build institutions. Testing and certification should be accredited in order to obtain international recognition.

Training – a fundamental development strategy
Massive training is a basic strategy for creating awareness and developing the necessary competence related to quality and product safety. Proof may be found in several East and Southeast Asian countries, at both national and company level. Section 11.5 describes lessons learned and recommends training strategies

Regional co-operation
Over the last 10 years, extensive regional co-operation has been developed in Africa, as described in Sections 5.6 and 7.5. These organisations should be fully utilised. Legislation, regulations and standardisation should be developed, based on the international model for regulatory harmonisation described above (and in Section 11.1).

International standards should be adopted as national standards and the *Reference to Standards* principle employed. In the SPS area there may be a need for regional African standards, justified by scientific arguments.

Many conformity assessment services lend themselves to regional co-operation, for example:

- Calibration services for industrial and legal metrology
- Reference laboratories and proficiency testing for chemical and microbiological testing for food safety, animal and plant health
- Scientifically based risk assessment
- Management system certification (ISO 9000, ISO 14000 and HACCP)
- Accreditation

Participation in worldwide organisations

Africa is composed of 53 countries. The continent would be able to exercise a substantial influence – if the countries co-operate. Co-operation should be based on common interests. In certain cases, the countries will be competitors, but there may still be areas of common interest, for example to work for SPS requirements that are adapted to African conditions.

Influence requires knowledge and experience in international work. In the case of Africa, many countries are still at an early stage in their learning process. They should seek assistance to develop their competence.

With the present number of international organisations, it is necessary to set priorities and make choices. Some of the most important trade policy bodies are the WTO/TBT and SPS committees, and UN agencies such as UNCTAD, ITC, WHO and FAO. Economic development and trade should be included in the *Poverty Reduction Strategy Papers (PRSP)* that are agreed with the World Bank and the International Monetary Fund.

African countries should strive to maintain their membership of ISO, Codex, IPPC and OIE, and possibly extend their membership to other organisations. African countries, like all other countries, have to set priorities for their participation in standards development. They should take part only in those committees that are of prime con-

cern to their countries. In many cases this would mean that participation would be concentrated to the relevant committees under Codex, OIE and IPPC, while the development of ISO standards, which are mainly for industrial products, would be left to others.

Co-ordination of the activities of international organisations is still weak. But there is a growing interest in supporting economic development and trade, including quality and product safety. Better co-ordination will benefit all interested parties.

From planning to action and results: The way forward

The intention of the authors is that this report shall be used to facilitate the development of trade in Africa. The recommendations included are expected to provide a good basis for development of this type. We recommend a four-step approach in the use of the report:

1. Creating awareness. The report should be given a wide circulation and direct approaches should be made to principal stakeholder groups such as private sector organisations, African governments, African institutions in the TBT/SPS infrastructure, international donor organisations, international organisations in the quality and product safety area.

2. Developing plans. Part II of this report proposes elements of plans at company, country and regional level. However, there is a need for specific planning for sectors of the economy, countries and regions in Africa. International organisations and donors should support development in Africa. Donor strategies are proposed in Chapter 13 and evaluation criteria in Chapter 14.

*3. Implementation***.** Implementation is the key to results. Too many good plans end up in the filing cabinet, no results being achieved. The responsibility for the implementation of export business development projects, new legislation and institutions rests with the African countries. However, industrial countries must be prepared to support planning and implementation as outlined in this report.

The industrial countries have a separate responsibility to open up their markets to value-added products based on African raw materials, notably agro-industrial products and textiles, see Chapter 5 and Section 6.1.

4. Measuring results. The results of development efforts should be measured regularly. Measuring and comparing the results against plans and objectives has a strong motivating effect, which will work at the company, business sector and national level.

2. Introduction

Globalisation is one of the most important factors in international development today. Globalisation involves an increasing flow of goods and other resources across national borders, and the emergence of organisational structures to manage these flows. One prominent feature is the development of international supply chains, aimed at satisfying the increasingly sophisticated requirements of the industrialised part of the world. Strong driving forces behind globalisation include technological developments, for example in transportation and communication, and liberalisation of financial markets including foreign direct investments, and trade agreements.

One of the results of globalisation has been increasingly strong growth in international trade. For industrialised countries, the rate of growth increased from 5.5% per year in the period 1982–1991 to 6.4% per year between 1992 and 1999 (IMF, 2000)[1]. Developing countries have taken part in this development, with average rates of growth increasing from 4.3 to 8.0% per year for the same periods. Africa, however, has lagged behind. For the same periods, the rate of growth for Africa *declined* from 2.7% to 2.1% per year. As a consequence, Africa's share of world trade has declined year by year and is now only 2%, while Africa's share of the world population is 10%. So far, globalisation has led to the further marginalisation of African countries, particularly LDCs, in world trade.

[1] References are listed in Appendix 5

International trade is extremely important for developing countries. During 1997–98, exports and imports of goods and services by LDCs constituted on average 43% of their GDP. Trade integration is actually at the same level as, or even higher than, OECD countries. The problem is not the level of integration, but rather its form (UNCTAD, 2002).

It is now generally recognised that there is a strong link between poverty, development and trade. Development of the private sector, of trade and the removal of barriers to trade play a prominent role in *The New Partnership for Africa's Development (NEPAD)*, a new master plan with wide support. *The Integrated Framework*, an initiative of the World Bank, IMF, ITC, UNCTAD, UNDP and WTO[2], promotes trade as a principal development strategy. UNCTAD, in its latest *Least Developed Country Report 2002* (UNCTAD 2002) states that the incidence of extreme poverty is highest in those LDCs that are dependent on primary commodity export. Most of the countries of Sub-Saharan Africa belong to this category. The UNCTAD report argues that these countries are caught in an international poverty trap, and that the current form of globalisation is tightening the trap.

At the same time, there is a major, but currently underestimated, opportunity for the rapid reduction of extreme poverty, through sustained economic growth based on the development of international trade. This requires the introduction of development-oriented poverty reduction strategies in which private enterprise entrepreneurship and development play a major part.

An important reason why developing countries in Africa have only been able to benefit from the positive effects of global trade to a small extent, are the non-tariff barriers[3]. Tariffs and quota restrictions have gradually been removed, but technical and sanitary/phytosanitary requirements (TBT/SPS for short) remain important barriers to trade. TBT/SPS requirements are legitimate and necessary to protect the health and safety of every society, in domestic as well as international trade, and are

[2] Acronyms are explained in Appendix 4

[3] Even if there is a general tendency towards lower tariffs, there are still tariffs of 200–600 % on many processed African agricultural products, see Section 5.1.

rooted in the World Trade Organisation (WTO) TBT and SPS agreements. But the requirements are demanding in terms of human and financial resources, as well as organisational capacity. A quality and product safety infrastructure is needed to comply with the requirements and at the same time to supply attractive products. In order to obtain market access, suppliers have to be aware of these requirements and have to be able to document compliance. Many developing countries are ill equipped in this respect.

The Swedish and the Norwegian governments have responded to the needs of developing countries by emphasising the development of trade in their donor policies. The government mandate for the Swedish International Development Cooperation Agency (Sida) for 2002 instructed Sida to pay greater attention to development of the private sector and trade in the partner countries. In Norway, the *Strategy for Norwegian support of private sector development in developing countries* (Min. of Foreign Affairs, 1999) charted the course.

Sida launched a strategy planning project in January 2002 in order to co-ordinate Swedish efforts and provide effective support, with particular reference to quality and product safety issues. In July, the Norwegian Development Co-operation Agency, Norad, joined the project as a co-sponsor, following an invitation from Sida.

The project *Trade – an opportunity for reducing poverty in Africa* sets out a strategy for a co-operation programme with the countries of Africa to promote economic development and trade, while at the same time ensuring safe products in domestic markets. The purpose of the project is to devise a strategic plan, with particular emphasis on *Technical Barriers to Trade (TBT), Sanitary and Phytosanitary Measures (SPS)* and other quality and product safety issues, including criteria against which *Trade-Related Technical Assistance (TRTA)* proposals may be assessed. This is the main report of the project. As such, Sida and Norad, as part of their basis for planning of specific initiatives which will follow in the years to come, will use the report. The report will be made available to other donors and interested parties.

The report comprises two parts, this Volume 1 plus a separate Volume 2 of annexes. Part I describes the position of Africa in international trade. The present

situation, including typical problem areas, is described. National and regional objectives are outlined, and a set of overall strategies for closing the gap between reality and objectives is proposed.

In Part II, the strategies are developed into an international development programme. The elements of the strategies are elaborated with specific recommendations for each element. Recommendations at the African level and at the international level are proposed separately. Certain national or regional recommendations are included, but it is beyond the scope of the project to develop plans for specific countries. Part II is general in nature and can be utilised by any country or donor organisation. Part II also includes evaluation criteria for support.

In addition to this main report, two mission reports have been prepared, see Appendix 5. The first mission, in August 2002, was to Uganda, Kenya, Tanzania, Mozambique, South Africa and Botswana. The second mission, in October 2002, was to Burkina Faso and Mali. There will also be a project report on the studies of trade agreements (Laanatza, 2002).

The project has been implemented under the direction of Sida's Private Sector Development Division, Department for Infrastructure and Economic Co-operation (INEC). Project leader: Margareta Davidson-Abdelli, Senior Adviser. The project has been implemented by a project team consisting of the following members: Christer Arvius, Swedish National Board of Trade; Ivar Foss, Ivar Foss Quality Management; Marianne A. Laanatza, Uppsala University; and Atle Ørbeck Sørheim, independent consultant. Arve Lund, independent consultant and AFNOR, the French national standards body, took part in the information collection and a field mission to West Africa. Ivar Foss and Atle Ørbeck Sørheim undertook the field mission to East and Southern Africa. Valuable inputs were received from experts in Africa and in international organisations. Ivar Foss is the main author and editor of this main report.

The report was presented at a stakeholders' meeting in Oslo on 16 December, 2002 and in Stockholm on 28 March 2003. A presentation workshop for African stakeholders is planned for November 2004. Copies of the report may be obtained from Sida or Norad.

3. Sida and Norad strategies and previous contributions to private sector development

3.1 The Swedish background

As a contribution to this report, Sida has submitted the following statements:

"Traditionally, Sida's development efforts have concentrated on human rights, democracy, health and the private sector. Recently, the Swedish government has instructed Sida to increase the emphasis on trade. This will be done in the context of Sida's Private Sector Development (PSD) Division.

The work is carried out in the context of appointed partner countries and regional and international fora.

Private Sector Development

The objective of Sida's support to Private Sector Development in the partner countries is to contribute to growth by creating a conductive environment for efficient markets that meet the needs of the poor.

In connection with its work on country strategies, Sida has given greater attention to analyses of the potential for, and obstacles to, development of the private sector and trade in the partner countries. This has also been a major theme of Sida's human resource development programmes in the operational area. Another major challenge faced by private sector support is to find effective ways of strengthening the participation of developing countries in the WTO.

Furthermore, a help-desk has been established at INEC/Private Sector Development Division to provide

advisory services for Sida and embassies on trade policy matters. An important step in the ambition to increase knowledge of and interest in trade questions inside and outside Sida is the Sida study *The least developed countries and world trade* (de Vylder et al., 2001).

Private sector development includes the following areas:

- Development of the institutional framework, support to the organisations of industry and commerce, legislation, quality infrastructure, capital supply and public administration
- Trade-related projects, exporting, promotion of business contacts, co-operation with international organisations
- Restructuring of state-owned companies, incorporation, changes to ownership structure (privatisation)
- Training for business people in areas such as general management, quality management, industrial environment, export know-how and international training programmes
- Transfer of knowledge between companies in Sweden and the partner countries, the *Start South* programme
- Economic co-operation

Policy for trade development

Sida's activities in trade development are based on the overall objectives of development co-operation. They are conducted in partnership with those countries with which Sida co-operates.

Sida must be able to assist developing countries – particularly the least developed – in their integration into the global economy, and in taking advantage of the opportunities for increased growth which may be offered by international trade and investment. Higher growth and increased employment are important means of reducing poverty.

At the same time, Sida shall assist in minimising adverse social, ethical and environmental effects that may be created via trade of this kind and via associated production and investments. These effects may arise, for example, through the strengthening of legislation, as well

as in the form of an impact on the market in both developed and developing countries.

Sida also has the task of assisting partner countries in becoming better able to analyse the effects of international and regional trade agreements. Furthermore, Sida is charged with providing material and observations for Swedish positions in the EU and WTO. As a way of supporting the implementation of international undertakings on behalf of developing countries, the acquisition of knowledge is especially important.

The policy sets out five strategic areas related to trade in which it is proposed that Sida should concentrate its efforts. In these strategic areas, a number of important activities are proposed as well as measures concerning capacity and allocation of responsibilities. The following areas have been defined:

- To promote trade as an instrument in Sida's bilateral co-operation, from the formulation of national strategies and national programmes, to specific projects
- To assist in creating favourable conditions and necessary legal frameworks for trade development (including environment and ethics) and investments
- To develop expertise in trade policies and the capacity for analysis
- To develop the capacity for handling environmental and ethical dimensions of trade and production and for striving to ensure that these aspects are taken into account in international trade
- To support trade promotion areas relevant to enterprises by developing concepts performing successfully today.

The present report is an element in this overall framework, and Sida's total engagement is much more far-reaching than the present project.

Examples of projects

Sida started work in developing quality institutions in the late 1970s, when the Tanzania Bureau of Standards (TBS) was one of the first co-operation partners. TBS

was provided with new buildings, laboratories and equipment, training and organisation development etc. The co-operation still continues.

In the 1980s, Sida instituted annual training courses in quality management. These were wide-ranging courses of several weeks' duration, organised in Sweden with participants from many parts of the world, and in which Africa was well represented.

In 2002 and 2003, Sida financed similar training in the SPS and TBT areas, developmed as international training programmes.

Over the last few years, Sida has supported the restructuring and development of Namibia's standardisation organisation and has provided support for laboratories in order to obtain accreditation, thus improving the country's competitiveness and enabling it to meet international trade requirements. The project covers, among other things, legislative issues, and making parts of the national standardisation body more effective and efficient while privatising other parts.

Sida has supported a number of developing countries in enhancing their national regulatory and quality infrastructures through technical assistance programmes. The approach that has been used in recent years is based on the above-mentioned experience, taking full account of international requirements and principles as stated in international standards and guidelines including international agreements (WTO and others) on trade. The countries involved include Mozambique, Sri Lanka and Guatemala."

3.2 The Norwegian background

As a contribution to this report, Norad has submitted the following statements:

"The government in Norway presented its *Strategy for Norwegian Support of Private Sector Development in Developing Countries* in 1999. The strategy establishes principles and guidelines for Norwegian support for private sector development including trade in developing countries and presents recommendations for making the strategy operational with an emphasis, among other things, on efforts and measures to:

– Help to reduce marginalisation of the poorest countries and strengthen their capacity to exploit the potential of globalisation, while limiting its disadvantages,
– Help to strengthen the South-South trade and regional economic co-operation between developing countries,
– Promote trade with developing countries by strengthening current arrangements for imports from developing countries to Norway and by giving increased priority to general measures for increasing trade with developing countries.
– As in the case of other development work, the implementation implies using the Norwegian resource base, including Norwegian commerce and industry, public institutions and NGOs, based on the needs of the developing countries.

The strategy states that increased trade and closer economic co-operation between developing countries represent a considerable potential for development, but realises that this potential is a major challenge. Support for regional measures that create a common frame of reference across national borders would establish favourable conditions for regional trade and integration, and should therefore be given priority. Institutional reforms in individual countries will also play a significant part in reducing the barriers to economic relations between poor countries and regions.

Support for such measures is recommended first of all for our main partner countries in Southern Africa (Mozambique, Malawi, Zambia, Tanzania and Uganda), where measures to strengthen economic and industrial policies should be given priority. This may involve measures for the development of infrastructure, as well as measures to reduce trade barriers and increase competitiveness through standardisation and quality management.

It is to be stressed that measures must be based on country-specific needs and in response to the wishes expressed by the developing countries themselves. This

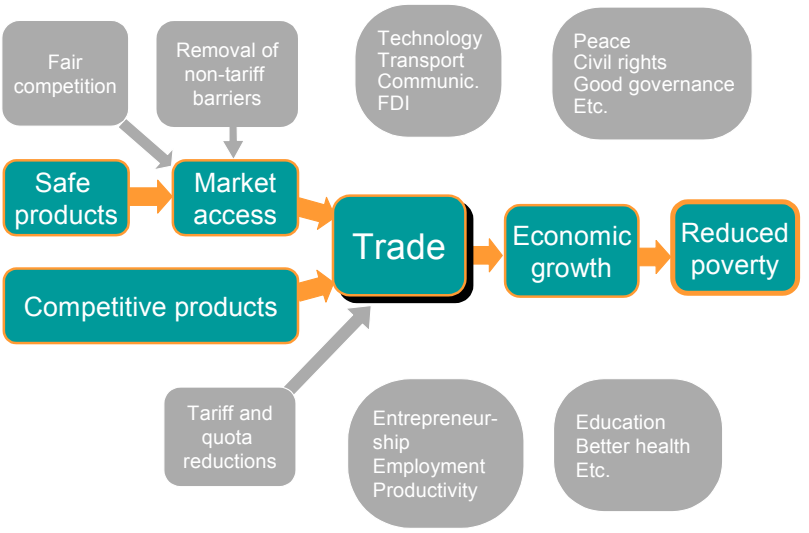


Figure 1: How trade can reduce poverty

will be achieved by:

- Analysing the weaknesses and bottlenecks that hinder development in the country concerned,
- Reaching agreement with the country's authorities, the private sector and other bilateral and multilateral donors on the measures that should be given priority,
- Selecting priority areas, mechanisms and channels for Norwegian support for private sector development.

In 2002, the Ministry of Foreign Affairs concluded a new action plan for combating poverty in developing countries (Min. of Foreign Affairs, 2002).

The present report will be a useful tool in Norad's further work to support trade-related projects in the region."

4. The strategy project for the development of a quality and product safety infrastructure in Africa

4.1 Objectives and scope

The overriding objective of the programmes of co-operation of Sida and Norad with developing countries is to reduce, and if possible eradicate, widespread poverty. Many factors are essential for economic growth and trade, but are outside the scope of this project. Such factors include democracy and human rights, macro-economic and social policies etc., which are addressed by other parts of the programmes of co-operation, see Chapter 3.

In the light of this, the following overall objectives are proposed for development of a programme for quality and product safety infrastructure in Africa:

- Improve economic growth and promote trade in Africa by enabling suppliers to become competitive in selected export markets
- Contribute to the health and safety of the citizens, sustainable development and poverty reduction by ensuring that national and regional TBT and SPS infrastructures are effective and efficient.

The scope of the project is illustrated in Figure 1. The project focuses on two factors: (1) development of the supply side in order to become competitive, and (2) development of the quality and product safety infrastructure to ensure product safety. The essential elements are highlighted in the central part of the figure. A large range of other factors are also important for reducing poverty. Some

of those most commonly discussed are shown in the upper and lower parts of Figure 1, but are considered outside the scope of this project.

The project encompasses the entire continent of Africa. However, it is beyond the scope of the project to go into specifics for each country. Common trends and themes have been identified whenever possible. Certain countries have been studied in more depth, notably those that were the subject of field missions. Summaries regarding these countries can be found in Vol. 2 of this report.

At the African level, the project is directed at three principal stakeholder groups:

- The private sector business communities: agriculture, fisheries, industry and other economic operators in production and trade, as well as their organisations such as chambers of commerce and export associations,
- Politicians and public authorities, including their professional agencies,
- The TBT/SPS infrastructure (standardisation and conformity assessment), public and private sector.

As we shall see, these stakeholder groups will have to act in concert in order to develop sustainable export initiatives. In addition, the report addresses:

- Consumer organisations which represent the general public.

The development of Africa is also a concern for the rest of the world. North – South co-operation is required. At the international level, we shall address two important stakeholder groups:

- Development institutions, at both the political and executive level. Donor organisations.
- The business community in industrial countries who are potential customers of imported products from Africa.

4.2 Project implementation

The main elements of the project plan were:

Part project 1: **Information collection**
Meetings, interviews, Internet searches, literature studies, EOTC metrology workshop in Belgium

Part project 2:	**Visits to institutions in Europe** WTO, UNCTAD, ITC, WHO, ISO, UNIDO, EU DG Trade, CEN, AFNOR,
Part project 3:	**Analysis of trade agreements**
Part project 4:	**Field missions, Africa** East and Southern Africa (Uganda, Kenya, Tanzania, Mozambique, Botswana, South Africa) West Africa (Burkina Faso and Mali)
Part project 5:	**Strategy development**
Part project 6:	**Project meetings**
Part project 7:	**Stakeholder conferences** ISO general assembly, Stockholm, September 23–27, 2002 Norad and other Norwegian stakeholders, Oslo, December 16, 2002 Sida and other Swedish stakeholders, Stockholm, March 28, 2003
Part project 8:	**Reports** Field mission report East and Southern Africa, December 6, 2002 Field mission report West Africa, December 10, 2002 Main report (Volume 1). March 10, 2003 Main report, annexes (Volume 2), April 11, 2003 Analysis of trade agreements, October 2003.

Project management

Project planning started in January 2002 and the main project started in April. The field missions to Africa were implemented in August and October 2002. Separate mission reports have been prepared for these field missions. Strategy development and reporting continued and the report became available in March 2003. A certain amount of up-dating was done in August 2004 prior to printing.

Dissemination of project reports and proposed use of the results is described in Chapter 15.

4.3 Project approach

The way of thinking behind the strategy planning project is illustrated in Figures 2 and 3. The project is

based on two classic models for strategic planning. The model starts by describing the present situation. Strong and weak sides are identified, as well as external opportunities and threats (SWOT analysis). Many donor development strategies focus only on the removal of constraints, or weak sides. In our opinion this is not sufficient. The focus must be on the utilisation of strong sides to establish a sustainable business, as is normally done in business development, in addition to removing constraints. One consequence of this approach is that development programmes will have to include business development components. The present situation is described in Part I, Chapters 5 – 7.

External:	**Opportunities:**	**Threats:**
Internal:	**Strong sides:**	**Weak sides:**

Figure 2: Strategic analysis of the present situation

Once the present situation is known, the Y model (Figure 3) is used to plan the strategies. A desirable future is described in the form of objectives. Specific objectives are described in Chapter 8, based on the general objectives of Section 4.1. From the analysis of the present situation and the description of a desirable future, the gaps can be deduced. Strategies have to be devised which can close the gaps. These are overall directions aimed at changing the present situation. For each of the strategies there is normally one or a few Critical Success Factors (CSF), factors that are essential for the realisation of the strategy. Examples may involve human resource development, access to certain types of infrastructure, or the removal of barriers. These steps are covered in Part II.

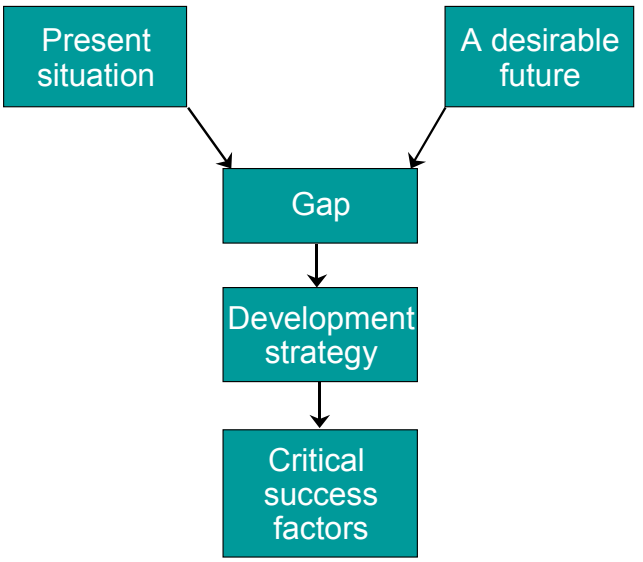


Figure 3: Strategic planning, using the Y-model

The next step is to implement the strategies. The African countries, regional organisations and institutions will bear the responsibility for implementation. But *Trade Related Technical Assistance (TRTA)* is available and will have to be utilised, in the form of projects or other instruments. These actions have to account for the CSFs, which become the link-pins between strategy development and implementation. The present project contains specific recommendations at the African and the international level, but stops short of action plans. The intention is that the African countries, supported by donors, will take over and prepare plans for implementation through existing or new networks.

PART I:
Africa in international trade. The present situation, objectives and strategies

5. Africa in the global trading system. International trade relations and agreements

5.1 The African countries and a short economic survey on Africa

African countries; LDCs and the others[4]

Of the world's population, 10% lives in Africa, but Africa's share of global GDP is only 1%, and its share of the world's trade is only 2%. From the statistical point of view, Africa is normally divided into two main parts: Sub-Saharan Africa and North Africa.

The total population of the Sub-Saharan region in 2001 was 674 million. Trends in respect of GNI per capita are very alarming. It fell from 550 USD in 1999 to 470 in 2001, and annual growth has decreased by 0.5% during the last three years to 3.0% in 2001. At the same time the rate of inflation has increased, and was almost 13% in 2001. South Africa stands out from the other countries in this region with a GNP per capita of 3,230 USD in 1999.

The distribution of welfare both between the Sub-Saharan countries and within each country is highly unequal. There is, for example, a vast difference between South Africa and other countries in the region regarding economic development and industrialisation, and there is also an uneven distribution of wealth. Even within South Africa there are tremendous differences.

[4] Based on World Bank Statistics

In Sub-Saharan Africa, 32 of the 48 countries are LDCs, in other words almost three of four Sub-Saharan African countries belong to the group of least developed countries. The countries are listed in the table in Appendix 2. Changing the prospects for the future is a real challenge.

North Africa consists of five countries: Algeria, Egypt, Libya, Morocco and Tunisia. The total population in 2001 was 143.7 million. The average GDP growth rate was 3.2% in 2001. Inflation was about 2.6% and GDP per capita about 1,500 USD in 2000. None are LDCs. Compared with Sub-Saharan Africa, the average level of welfare is considerably higher in North Africa.

Human development in Africa

Annual population growth in the Sub-Saharan region decreased during the last three years by 0.5% to 2.3%, and life expectancy had fallen to 46.5 years in 2000. The main reason is the disastrous HIV/Aids epidemic. In North Africa population growth was 1.8% in 2001, which is much lower than a decade earlier.

Based on the variables presented in UNDP Human Development Report 2002, Africa's profile shows that 46.7% of the Sub-Saharan population lived on less than 1 USD a day in 1999. The corresponding figure for North Africa is 2.1%. Trends related to disparities in income show an increasing gap in Sub-Saharan Africa, but a closing gap in North Africa. Regarding disparities in literacy, developments in both regions are positive.

The so-called *Millennium Development Goals* aim at halving hunger, achieving universal primary education, achieving gender equality in primary education, reducing under-five mortality by two-thirds and halving the proportion of people without sustainable, safe drinking water. Most of the Sub-Saharan countries lag far behind the goals, or no data are available. From all these perspectives, North Africa is much better off.

Africa in world trade

The figures for Africa's total exports in 1999 and 2000 show an increase from 101.4 billion USD to 121.4 billion USD. The increase is mainly due to fluctuations in oil

prices and is linked to a great extent to an increase in exports to the US from 14.3 to 22.7 billion USD. Most of the exports were directed towards the Industrial Countries, namely 64.4% and 69.0% in 1999 and 2000 respectively.

The EU is Africa's most important market. The value of Africa's exports to the EU was 49.2 billion USD in 1999 and 50.1 billion USD in 2000, and the EU's share of Africa's total exports was 48.5% and 41.3% in 1999 and 2000 respectively. The Sub-Saharan countries' exports to the EU, with the exception of South Africa, are poorly diversified. Just 10 products account for about 60% of total exports. Petroleum oil is the most important and its share is about 15% of the total value, followed by diamonds (about 10%), cocoa, coffee, wood, sugar (each about 5%) and bananas (about 2%). The bulk of the African countries' exports are raw materials. Finished goods represent about 20% of the total export value, and agricultural products between 35 and 40%. About half of the exports from all the Sub-Saharan countries – South Africa excluded – originate from 10 countries among which Nigeria predominates, followed by Ivory Coast, Cameroon, Ghana, Mauritius and Gabon.

The direction of the rest of the exports is to other developing countries or economies in transition. In the year 2000, 11.8% went to Asian countries, 9.7% stayed within Africa, 3.8% went to Latin America, 2.3% to Central and Eastern Europe, and 2.1% to the Middle East.

The corresponding figures for imports to Africa shows a value of 110.1 billion USD in 1999 and 117.6 billion USD in 2000. The value of imports from industrial countries was almost the same in 1999 and 2000, namely 69.1 billion USD and 69.5 billion USD respectively, which are equivalent to 62.8% and 59.1% of total imports for the years in question. Exports from the EU to Africa amounted to 51.1 billion USD in 1999 and 61.7 billion USD in 2000, and the market share was 46.4% and 52.5% for the two years.

The origin of the rest of the imports to Africa is divided amongst developing countries: 17.7% originates from Asia, 10.8% from Africa itself, 4.5% from the

Middle East, 3.3% from Central and Eastern Europe, and 2.1% from Latin America.

Foreign Direct Investments in Africa

Although the need for Foreign Direct Investments (FDI) in Sub-Saharan Africa has increased, the amount has fallen, from 8.1 billion USD in 1999 to 6.7 billion in 2000. Development assistance per capita also shows a negative trend. The level in 2000 was 20.4 USD compared to 24.5 the year before. All in all, the picture of economic development in Sub-Saharan Africa is rather gloomy.

The amount of foreign direct investments is also low in North Africa, only 3 billion USD in 2000, which is equivalent to 0.26% of global foreign direct investments that year. A comparison between the two regions, Sub-Saharan Africa and North Africa, regarding the amount of foreign direct investments, shows that the former receives about 10 USD and the latter about 20 USD per capita.

In 1999, Angola, Egypt, Morocco, Nigeria, South Africa and Tunisia attracted sizeable amounts of FDI. In the cases of Angola and Nigeria, most investments are allocated to petroleum projects. In other cases deregulation and privatisation are the reason, as in Egypt.

Africa and international competition

Trends in respect of terms of trade have not been favourable in Africa during the last two decades. Africa is mainly an exporter of raw materials and had to accept an increasing gap between the prices of raw materials and increases in the prices of imported machines and other equipment, cars, trucks etc. The possibilities of financing more extensive investment programmes have been very limited due to the lack of both local and international investment capital.

To improve competition, fulfil rules of origin and obtain duty free market access on important markets such as the EU, much more regional economic integration is needed. Where the production of textiles and clothes is concerned, South Africa could have helped its neighbouring countries with materials, but unfortunately

EU rules of origin have blocked co-operation of this type for some years. If the EU really wants the African countries to have the opportunity to compete with countries such as China and India in the future, this is a great mistake. All voluntary agreements in this sector will terminate in 2005. Textiles and clothes are the type of products that most industrialisation has started with, both in countries which belong to the category of industrial countries, and the more advanced developing countries.

There is still dramatic tariff escalation on many of the processed African agricultural products. Current tariff rates for some sorts of jams and preserved fruit are 200 – 600%! Tariff escalation means that the tariff rate for a product increases out of proportion when the product is processed compared to the tariff rate for the same product unprocessed. Without such rates, there would have been many more factories in Africa producing for export to the EU. Even with the improved market access conditions for processed agricultural products offered by the EU to all LDCs, there are problems in fulfilling the conditions related to rules of origin and to sanitary and phytosanitary aspects. These problems can be solved, but require political determination and persistent efforts. The work to reduce tariff rates, notably for processed agricultural products, has to continue.

Fundamental aspects related to a competitive export-oriented industry are also concerned with the fulfilment of standards and other technical conditions and sanitary and phytosanitary requirements for agro-related products. These topics are central issues in other parts of this report.

5.2 Africa and the WTO

African Members and Observers at the WTO

Most African countries are members of the WTO, namely 40 states. Six states are observers: Cape Verde, Equatorial Guinea, Ethiopia, Sao Tome and Principe, Seychelles and Sudan. Membership status is shown in the table in Appendix 2.

Some African countries have still not applied for membership of the WTO. The following five countries

are in this category: Comoros, Eritrea, Liberia, Libya and Somalia. The reasons differ. A state of war and/or inadequate political-economic systems for WTO-related market oriented obligations are, however, the most frequent.

Obligations in the WTO for developing countries

All developing countries have to reduce their tariffs on industrial products in accordance with the regulations, and to "bind" them, which means that they will never be increased above the level at which they have been "bound". Regarding subsidies linked to agricultural products, a reduction has to take place within ten years, although most of the developing countries have not introduced subsidies of this type.

The TRIPS agreement requires members to comply with certain minimum standards for the protection of intellectual property rights. However, TRIPS allows different periods of time to apply its provisions. Since January 1, 2000 developing countries have had to apply all the provisions of the agreement, except for the special transition rules related to product patent protection. With the extended transition period, developing countries under these rules have until January 1, 2005 to introduce product patent protection. In addition, countries shall ensure that any change in their legislation during the transition period does not result in a lesser degree of consistency with the TRIPS agreement. However, this does not prevent countries from amending or interpreting current legislation within the margins of flexibility provided for by the Agreement or by Ministerial Declarations.

The General Agreement on Trade in Services (GATS) contains three elements: a framework of general rules and disciplines; annexes addressing special conditions relating to individual sectors (such as financial services, telecommunications and air transport services); and national schedules of market access commitments. These schedules – like tariff schedules under GATT – are an integral part of the agreement, and include all developing countries. The recorded conditions for trade in services cannot be changed for the worse without

notice being given and negotiations for compensation with affected countries. Developing countries can, however, decide themselves when each kind of service shall be included. The target has been established, but the pace at which it will reach the target is decided by the country itself.

Regarding trade-related investment measures (TRIMs), the agreement states that developing countries have to eliminate them within five years. An importing country cannot demand that the exporting company should make any direct investments in the country concerned. (Regarding purchase of arms, this is accepted because the defence sector is not included in any agreement in the WTO.)

There are also common rules for Valuation of Goods at Customs and on import licensing. Technical Regulations and Standards related to the WTO/TBT and SPS agreements are described in Section 5.3. Several developing countries including the African Union are demanding a more flexible application of the WTO-regulations. After the failures at the WTO-ministrerial meetings in Seattle and Cancun (Sept. 2003) a more open discussion has taken place, and the new negotiation round, the Doha round has restarted.

Obligations in the WTO for the LDCs

The obligations relating to LDCs in the WTO are more limited than to developing countries in general. All LDCs also have to reduce their tariffs on industrial products in accordance with the regulations, but there are no obligations at all in respect of subsidies linked to agricultural products. On the other hand, normally the LDCs have no possibility of financing subsidies in the same way as the industrial countries, particularly in the EU.

There are obligations for the LDCs connected to TRIPs, which have to be fulfilled before January 1, 2006, with the possibility of an extension. Following the Doha declaration on TRIPS and Public Health, LDCs were granted an extension of the transition period up to January 1, 2016 to apply the TRIPS section on patents with respect to pharmaceutical products. Regarding

TRIMs, elimination has to take place within seven years. For trade in services the conditions are the same for all countries. When a country has opened up a sector it cannot change the conditions to the worse without informing and negotiating compensation with those affected.

In the long run, the common principle of *Single Undertaking* in the WTO for all the agreements ties up the least developing countries to the same criteria as other developing countries, as well as developed countries. As a consequence of this principle, no member has the right to claim exclusion from any particular agreement concluded in the Uruguay round, which was the basis for establishing the WTO. The only flexibility is in the transition rules.

5.3 The WTO TBT and SPS agreements

Technical requirements for products

Technical and other requirements for products, as well as requirements for conformity assessment such as testing, certification etc. were originally introduced to protect the public from hazardous or substandard products and practices in each country, and the requirements are one of the most important tools to this effect. As the systems developed according to national preferences, they gradually became effective barriers to trade. Certain countries have even used such requirements to establish new barriers to trade. Today, this is of great concern to international trade.

GATT, and later WTO, have developed rules for the handling of such requirements. These are manifested in two agreements, the *Technical Barriers to Trade Agreement (TBT agreement)* and the *WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS agreement)*. The TBT agreement deals mostly with industrial goods, but also includes certain aspects, such as packaging and labelling, of agricultural or agro-industrial products.

The SPS agreement deals with food safety, animal and plant health. The agreement affirms the rights of WTO members to restrict international trade when necessary to protect human, animal or plant life or health. At the same time, it aims to ensure that unneces-

sary health and safety regulations are not used as an excuse for protecting domestic producers from trade competition.

The TBT and SPS agreements were negotiated during the Uruguay round and entered into effect on January 1, 1995. The WTO has established two committees to oversee the implementation of the agreements.

The TBT agreement

This agreement covers technical regulations, standards and conformity assessment procedures. Technical regulations are mandatory requirements of governments, designed to fulfil objectives such as prevention of deceptive practices, protection of safety, health and the environment. Standards are voluntary documents, developed for common use. Their objective includes those of the technical regulations, but they also aim wider, for example uniformity of products, in order to facilitate trade. Voluntary standards are usually developed by the participation of a wide range of interest groups, such as government, trade and industry, consumers and research. Conformity assessment is the procedure used to ensure that technical regulations or standards are met, for example inspection, testing, certification, etc.

The aim of the TBT agreement is to ensure that technical requirements or conformity assessment procedures do not in themselves create unnecessary obstacles to international trade. The agreement recognises that all governments have the right to take measures necessary to ensure that their legitimate objectives are met, but these measures should not discriminate against countries (including their own) or result in disguised restrictions on trade. The WTO/TBT committee has laid down principles for the development of international standards such as transparency, openness, impartiality and consensus, effectiveness and relevance, coherence and a development dimension.

The SPS agreement

This agreement affirms the rights of WTO members to restrict international trade when necessary to protect human, animal or plant life or health. At the same time,

it aims to ensure that unnecessary health and safety regulations are not used as an excuse for protecting domestic producers from trade competition. To avoid SPS measures being used as disguised trade restrictions, the SPS agreement requires such measures to be based on scientific arguments, and they may not discriminate between countries where similar conditions prevail.

WTO members shall base their SPS measures on international standards and explicitly recognise three intergovernmental organisations: the *FAO/WHO Codex Alimentarius Commission (Codex)* for food safety, the *Office International des Epizooties (OIE)* for animal health, and the *FAO International Plant Protection Convention (IPPC)* for plant health. Measures based on these organisations' standards are deemed to comply with the SPS agreement.

Similarities and differences

Both agreements require that the measures applied shall be consistent with the risk level and the necessary protection, in order to minimise restrictions on trade (the proportionality principle). Furthermore, trade partners and governments should recognise the equivalence of requirements, as well as mutual recognition of conformity assessment procedures. In the interest of transparency, members of WTO have to publish their technical and SPS requirements. They are required to establish a national notification authority and an enquiry point.

An important difference between the two agreements is that, under the TBT agreement, governments may decide not to use international standards when they are 'ineffective or inappropriate', whereas, under the SPS agreement, the only reason for not using international standards are scientific arguments resulting from an assessment of the potential health risks. 'Standard' therefore has different meanings in the two agreements, and this has important practical implications. Since standards are mandatory in the SPS area, the international organisations Codex, OIE and IPPC have a stronger position than international organisations for voluntary standardisation such as ISO and IEC.

5.4 Africa and the EU. A survey of trade agreements

The Cotonou agreement

From the very beginning there have always been special relations between Africa and the EEC. In the protocol attached to the Treaty of Rome, association was mentioned as the future link between former colonies in Africa and the EEC. Different agreements have applied. During the period from 1975 to 2000, Lomé I–IV were in force. Since 2000 it has been the Cotonou agreement, named after the city where it was signed on June 23 that year.

The Cotonou agreement includes economic co-operation between the EU and the Sub-Saharan countries in all sectors. The former colonies in the Caribbean and Pacific regions also signed the agreement, the so-called ACP countries, where A stands for Africa, C for Caribbean and P for Pacific. There is a special bilateral free trade agreement between South Africa and the EU (see below), although South Africa is a partner in the Cotonou context.

All the joint projects and activities of the EU and the ACP countries have been financed by the European Development Funds (EDFs). The amount of the current EDF, which is the 9th, is 13.5 billion Euro, and it covers 79 ACP countries, and those overseas territories still controlled by the EU, from 2000 to 2007. Together with remaining resources from earlier EDFs the amount available is about 25 billion Euro.

The old trade regime of the Lomé Conventions was temporarily transferred to the Cotonou agreement. The Cotonou agreement is planned to be in force for 20 years, but its trade regime has to be changed completely. The reason for this is that it is not WTO-compatible. The GATT and WTO trade regimes do not allow any special treatment for certain developing countries. Only two categories of developing countries are accepted, ”normal” developing countries and the least developed countries. There are two alternatives for a ”normal”

developing ACP country: either to accept the EU's general trade preferences for developing countries, the GSP, or to accept a free trade agreement with the EU. The GSP is less favourable compared to the current trade regime in the Cotonou agreement, and the other alternative, a free trade agreement, is very demanding, even if a transition period is included.

Both TBT and SPS aspects are included in the Cotonou agreement. Article 47 covers standardisation and certification, and article 46 sanitary and phytosanitary measures. The agreement includes all issues included in the WTO trade regimes, and the parties have to be active in the WTO as such.

Future Economic Partnership Agreements (EPAs)

In September 2002 the EU Council of Ministers authorised the Commission to negotiate so-called Economic Partnership Agreements (EPAs) with the ACP countries and regions. The EPAs are intended to cover all trade and trade-related areas, as in all other new free trade agreements. The fundamental areas are trade in industrial goods, special lists for agricultural products, rules for competition and state aid, intellectual property rights and trade in services. The latter area will probably only be developed in the long term. The list of products will be at least the same as in the Cotonou agreement and the more favourable rules of origin will be transferred to the new agreements. The transition period for elimination of tariffs on industrial products will be at least 12 years, as in the Mediterranean partnership agreements.

Grouping of Sub-Saharan African countries regarding EPAs

In the future trade regime it seems as if the three regions, Africa, Caribbean and Pacific, will be separated to a grater extent from each other. However, Sub-Saharan Africa will also be divided into sub-areas, if the strategy of the EU is implemented. This is, however, a very tricky issue. The African states underlined their wish to be kept together. They criticise the EU for having double standards: why should Africa be divided when the EU itself is being enlarged all the time?

The question is not only to keep Sub-Saharan Africa together, but also how to treat the LDCs in Africa. If all the African LDCs are kept outside the free trade concept, only one fourth of the states will sign the EPAs. All efforts to improve intra-African trade and industrial integration may be blocked if they do not have the same type of agreement and the same rules of origin, including allowance for cumulation.

The LDCs know the conditions that they will get, namely those that are already in force in the EC regulations for its enlarged GSP for LDCs. It is named "Everything But Arms" (EBA), and the reason for this is that all products except arms will be included. There is a transition period for rice, bananas and sugar. The defence sector is not included in the WTO rules nor in normal free trade agreements. Anyhow, the EPA negotiations are now on track. In July 2004 the EU held separate meetings with the following four regions in Africa: the Southern Africa Development Community (SADC), Central Africa, West Africa and Eastern and Southern Africa (ESA).

EU and South Africa

As mentioned above, there is a special agreement between South Africa and the EU. It is called the Trade and Development Agreement, and it has been in force since January 1, 2000. In June 2002 the 3rd meeting was held between the parties, and they underlined the positive growth in trade that has taken place during the last one and half years.

The character of the EU-South Africa agreement is different from what can be expected in the future EPAs. As a much more highly developed country, South Africa is expected to accept more restrictions on agricultural products and has to comply with more advanced conditions in areas such as intellectual property rights. Finally, as pointed out above, the agreement with South Africa has already been concluded.

Regarding rules of origin cumulation, South Africa and other Sub-Saharan countries have obtained certain possibilities in the Cotonou agreement. But the EU has

included temporary restrictions on textiles and clothes. This is very counterproductive for the African states concerned.

South Africa can apply for financing of joint African projects from the EDFs if the projects are to be located in any Sub-Saharan country outside South Africa. Any joint TBT or SPS-related project could thus be implemented together with South Africa in any neighbouring country.

Africa and the Barcelona process

The EU has a special policy for the Mediterranean countries, which is stated in the so-called Barcelona Declaration of November 1995. The declaration includes three chapters, the first on democracy and security, the second on free trade and economic cooperation, and the third on social and cultural co-operation. Four of the five countries in North Africa are part of the Barcelona process and have already signed free trade agreements with the EU, namely Tunisia, Morocco, Egypt and Algeria. The two first have been in force since 1998 and 2000 respectively. A transition period of 12 years is included for the elimination of tariffs. Regarding the rule of origin cumulation, the EU has created a hotchpotch, which blocks all positive efforts for industrial integration in exports. The rules of origin cumulation in the Cotonou agreements have offered certain possibilities for Sub-Saharan African states to cumulate with those in the North, but ways of using this tool remain to be resolved.

Compared with the coverage of products and conditions included in the Cotonou agreement, the Euro-Mediterranean agreements are less favourable. Like the EDFs for the ACP countries, there is a special assistance programme for the Mediterranean countries named MED A. The second MED A covers the period 2000–2006, amounting to 5.36 billion Euro.

5.5 Africa and the US

During the presidency of Bill Clinton, the US decided to upgrade its relationship with Africa. One of the questions was why it was only European companies that were

predominant in Africa, as its trade potential was also quite interesting for American companies. The core issue in the new US-African programme of co-operation was the US trade initiative for Sub-Saharan Africa and, in October 2000, the Africa Growth and Opportunity Act (AGOA) came into effect. Through AGOA, the US offers the Sub-Saharan countries tangible incentives, provided they continue their efforts to open their economies and build free markets. In August 2002, President George Bush signed amendments to AGOA, also known as AGOA II. The preferential access for imports from the African region concerned has expanded substantially, and access to US technical expertise and credits has improved. In addition to these steps, a US-Sub-Saharan Africa Trade and Economic Forum will be established in order to improve trade and investment.

The enlargement of preferences has been arranged within the framework of the US's GSP. 1 800 items have been added to the existing 4 600 items in the general GSP. These benefits have been extended to September 30, 2008 and include 45 of the 48 Sub-Saharan countries.

The impact of AGOA has hitherto been a dramatic increase in exports from US to Africa, which the trade figures in Section 5.1 demonstrated.

5.6 Important regional groupings for trade in Africa

The African Union (AU)

A process of transition formally took place in May 2001 when the Organization of African Unity (OAU) became the African Union (AU). The objectives of the AU cover all aspects from unity and human rights to economic integration and trade. All African states except Morocco are members. The 53 member countries have agreed to accelerate the process of implementing an earlier treaty, (the Abuja Treaty) on establishing the African Economic Community. This process includes the establishment of an African Central Bank, an African Monetary Union as well as an African Court of Justice and a Pan-African Parliament. In the short term, the AU will co-ordinate and harmonize the policies of the existing and future

Regional Economic Communities for the gradual attainment of the objectives of the union.

Concerning the economic framework and strategy for development, all such initiatives have been deeply penetrated and presented in the plan for New Partnership for Africa's Development (NEPAD), see Section 5.7.

Common Market for Eastern and Southern Africa (COMESA)
COMESA was set up by the Preferential Trade Area for Eastern and Southern Africa (PTA) in 1993. Its aim was to transform the PTA from a preference area into a full common market and trading block, open to foreign investment, by the year 2000. COMESA has 20 members including most states in East and Central Africa. The member states of COMESA are shown in Appendix 2.

Many COMESA member states are also members of one or more regional groupings such as the East African Community (EAC), the Southern African Development Community (SADC), Southern African Customs Union (SACU), Intergovernmental Authority on Development (IGAD), and Indian Ocean Commission (IOC). Some of the member states are concerned that their dual or even multiple membership in these organisations makes it difficult for them to implement agreed programmes, including making membership contributions.

The COMESA Treaty, which sets the agenda for COMESA, covers a large number of sectors and activities. The main issues have been the following:

- Achievement of zero tariffs for all tradable goods among COMESA members (free trade area status) by the year 2000;
- Establishment of a common external tariff, (CET) or customs union by the year 2004 with less restricted movement of people (common market status); and
- Establishment of a monetary union, free movement of people including right of establishment (economic community status) by the year 2025.

Intra-COMESA trade is currently growing at a rate of 20% per annum.

COMESA has initiated a *Standards, Quality, Metrology and Testing* (SQMT) project and is working to strengthen the national standardisation bodies. COMESA co-operates with ARSO, the African Regional Organisation for Standardisation, see Section 7.5.

COMESA has a liaison committee with SADC. Harmonisation between COMESA and SADC is essential, since nine countries are members of both organisations.

COMESA has developed an Agricultural Policy and established a *COMESA Food and Agricultural Trade Promotion Unit*. The need to establish common phytosanitary regulations and common standards in the region has been underlined. In COMESA's words: "*These measures alone would provide a significant boost to trade in food crops and so improve the food security of the region.*"

Southern African Development Community (SADC)

The Declaration and Treaty establishing the Southern Africa Development Community (SADC) was signed at the Summit of Heads of State or Government on July 17, 1992, in Windhoek, Namibia. SADC replaced the Southern African Development Co-ordination Conference (SADCC), which was set up in 1980. South Africa joined SADC in 1994 followed by Mauritius (1995), the Democratic Republic of Congo (DRC) (1997), and Seychelles (1997). Uganda has applied for membership of SADC, and is awaiting SADC approval. The SADC-members Angola, DRC, Malawi, Mauritius, Namibia, Seychelles, Swaziland, Zambia and Zimbabwe, are also members of COMESA. Lists of members can be found in Appendix 2.

The process of restructuring the SADC mandate to focus on regional economic integration is continuing. Current SADC objectives include harmonization and rationalization of policies and strategies for sustainable development in all areas, as well as the successful implementation of the SADC Trade Protocol. The Protocol, which calls for an 85% reduction of internal trade barriers, came into effect on September 1, 2000. The full implementation of the Protocol is on track and the

region hopes to attain a free trade area by 2008. Within the SADC region, the national currencies of Namibia, Lesotho, and Swaziland are linked to the South African rand through the Common Monetary Area (CMA). SADC members are working to eliminate exchange controls in preparation for a possible single currency in the region.

Elimination of Non-Tariff Barriers to Trade continues to be a major area of concern to member countries. Article 17 of the Trade Protocol deals with standards and technical regulations on trade. Furthermore, a separate SADC Protocol on SQAM (Standards, Quality Assurance, Accreditation and Metrology) was adopted in 2000. The objectives of this protocol *"..... shall be the progressive elimination of TBTs amongst the Member States and between SADC and other regional and international trading blocks, and the promotion of quality and of an infrastructure for quality in the Member States."* SADC SQAM is further described in Section 7.5.

In the SPS area, the SADC Trade Protocol confirms the principles of the WTO/SPS agreement in Article 16 and states that international standards, harmonisation and the principles of equivalence shall apply. An extensive annex to the Trade Protocol related to SPS issues has been drafted and is now being discussed among SADC member countries. The annex has also been offered to COMESA for their consideration. SADC is considering the establishment of a *Food Safety Co-ordination Body* to co-ordinate SPS and food safety matters at the regional level and to provide advice and services.

Southern African Customs Union (SACU)

The Southern African Customs Union (SACU) came into existence on December 11, 1969 when the Customs Union Agreement was signed by South Africa, Botswana, Lesotho, Namibia and Swaziland. It entered into force on March 1, 1970, thereby replacing the Customs Union Agreement of 1910.

SACU is the oldest Customs Union in the world. It meets annually to discuss matters related to the Agreement. There are also technical liaison committees: the Customs Technical Liaison Committee, the Trade

and Industry Liaison Committee and the Ad hoc Sub-Committee on Agriculture, which meet three times a year. Its aim is to maintain the free interchange of goods between member countries. It provides for a common external tariff and a common excise tariff in this common customs area. All customs and excise collected in the common customs area are paid into South Africa's national revenue fund. The revenue is shared among members according to a revenue-sharing formula as described in the agreement. South Africa is the custodian of this pool.

Following the formation of the Government of National Unity in South Africa in April 1994, member states concurred that the present agreement should be renegotiated in order to democratise SACU and address the current needs of the SACU member states more effectively. With this in mind, the Ministers of Trade and Industry of the five member states met in Pretoria on November 11, 1994 to discuss the renegotiation of the 1969 agreement. The Ministers appointed a Customs Union Task Team (CUTT), which was given the mandate to make recommendations to the Ministers. CUTT has met on numerous occasions in the various member states and good progress has been made in the renegotiation process.

At a meeting of Ministers of Trade and Finance of the five SACU Member States, held in Centurion, Pretoria on September 5, 2000, the Ministers reached consensus on the principles of underpinning institutional reform in the Southern African Customs Union.

Union Economique et Monétaire Ouest-Africaine (UEMOA) or West African Economic and Monetary Union

The UEMOA was formed in 1994 and evolved from the old UMOA The latter was an umbrella monetary union formed by the treaty of November 1973 to preserve the franc zone system and common currency which was established in the region during the French colonial period. The member states are Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo. The Union's central bank is the BCEAO, with the same membership.

UEMOA has taken several important steps to implement its targets. In December 1999, the states adopted a common industrial policy and a special pact regarding convergence, stability, growth and solidarity. In 2000, the free circulation of all products (including agricultural products) and elimination of all types of charges and taxes was introduced in UEMOA. The common tariffs in respect of third countries have been reduced and in 2000 the maximum tariff was set at 22%. Other decisions are related to reforms in the public sector of the member countries and transparency of public finances. In 2001, an agricultural policy was adopted, as was a common policy for energy and mining. UEMOA has developed a *Common Industrial Policy,* see Section 7.5.

Economic Community of West African States (ECOWAS)
ECOWAS is an economic community of 15 West African states, which form a solid geographical bloc from Mauritania to Niger. It includes all coastal countries as far as Nigeria. The member states are shown in Appendix 2. Compared to UEMOA, ECOWAS has hitherto been a failure where trade liberalisation is concerned. The implementation of rightful provisions of the community levy and its conversion into a solidarity fund to be placed at the disposal of all the member States is intended to assist in finding a lasting solution to the funding of compensation for customs revenue losses due to trade liberalisation. Remaining member states, which have not yet reduced their customs duties, are expected to do so. In order to accelerate the creation of the West African common market, UEMOA and ECOWAS have undertaken to harmonise their trade liberalisation schemes. Further efforts need to be made to finalise this co-operation.

Arab Maghreb Union (AMU)
In 1989, five countries in North Africa, namely Algeria, Libya, Mauritania, Morocco and Tunisia decided to establish the Arab Maghreb Union (AMU). Since 1964 there had been institutional co-operation between the countries which included free trade efforts, but political contradictions blocked all progress. It was intended that

a customs union should be established within the framework of the AMU. However, political complications have once more delayed implementation. In particular it is the unsolved question of Western Sahara which complicates co-operation, although all the countries agree upon the necessity of extensive co-operation and economic integration in the Maghreb region.

Arab Free Trade Agreement (AFTA) and Africa

The Arab Free Trade Agreement (AFTA) was established by 14 Arab countries in 1997. Under the AFTA concept, tariffs will be reduced for participating members by 10 per cent annually. The target is to implement a free trade area by 2007. Even if most of the countries concerned have followed the process of tariff reductions, it is uncertain whether the target will be reached. There are too many exceptions included and the rules of origin are not completely and clearly defined.

There is yet another Intra-Arab organisation worth mentioning, the Arab Industrial Development & Mining Organisation, which was established in Rabat in Morocco in 1978.

Islamic economic co-operation and standards in Africa

Considerable economic co-operation has taken place within the Organisation of the Islamic Conference (OIC) during the last two decades. A total of 41 Islamic countries in Africa, Asia and Europe are members. One of the related institutions is the Standing Committee for Economic and Commercial Co-operation (COMCEC), located in Ankara in Turkey. COMCEC held its seventeenth session in October 2001. Among its responsibilities there is also the Statute for Standards and Metrology Institute for Islamic Countries. One of the principal issues during the session was "The Effects of Non-Tariff Barriers on Foreign Trade of the OIC Member Countries." Special country reports on Guinea, Tunisia, Morocco, Nigeria, Mali and Egypt were presented. There is a joint authority for standards. This Islamic standardisation authority co-operates closely with the Turkish Standardisation Authority in Ankara, and it is located in the same building.

The United Nations Economic Commission for Africa (ECA)
The mandate of ECA is to support the economic and social development of ECA's 53 member states, foster regional integration, and promote international co-operation for Africa's development. ECA was established in 1958. It reports directly to the UN Economic and Social Council (ECOSOC) through the Conference of African Ministers responsible for economic and social development and planning, convenes a number of intergovernmental organs and committees, and has a staff of some 850 persons. ECA was instrumental in setting up the African Development Bank (ADB) and supported the establishment of ECOWAS and PTA/COMESA etc.

ECA gives its support to all the new millennium initiatives, particularly the OMEGA Plan from Senegal and the African Recovery Programme (MAP) presented by South Africa, and the outcome of the New Partnership for Africa's Development (NEPAD), see Section 5.6. From ECA's point of view, Africa needs to emerge from the stagnation and crises that have characterised much of its post-independence era, and the vision of an African renaissance is not a mirage – with economic reforms and the right policies and structures much can be done to both increase growth and reduce poverty.

5.7 New Partnership for Africa's Development – NEPAD

The New Partnership for Africa's Development (NEPAD) is a merger of the Millennium Partnership for the African Recovery Programme (MAP) and the so-called OMEGA Plan, and it was finalised on July 3, 2001. The New African Initiative (NAI) was born from this merger and was approved by the PAU Summit Heads of State and Government on July 11, 2001. The policy framework was finalised in October the same year, and NEPAD was formed.

NEPAD is a vision and a programme of action for the re-development of the African continent, a plan that has been conceived and developed by African leaders. It is a comprehensive, integrated plan that addresses key social, economic and political priorities in a coherent and

balanced manner. It is a commitment by African leaders to accelerate the integration of the African continent into the global economy. The goals are:

- To promote accelerated growth and sustainable development
- To eradicate widespread and severe poverty
- To halt the marginalisation of Africa in the globalisation process.

African States presented NEPAD to the G8 Summit in Genoa in Italy in June 2001. The response from G8 a year later was an agreement on an "Africa Action Plan". The main points concerning economy and trade are the following:

- To improve global market access for African exports by tackling trade barriers and farm subsidies by 2005
- To work towards spending half or more of the G8 countries' annual development assistance – about 6 billion USD – on African nations that govern justly.

To follow the development of each individual state, an African Peer Review Mechanism (APRM) was established as a result of the meeting of the first session of the Assembly of the African Union (AU) in South Africa in July 2002.

NEPAD contains highly specific objectives related to private sector development, removal of technical barriers to trade, and food security. These objectives have been further elaborated into the specific objectives of the present programme that are presented in Chapter 8 of this report.

6. Implications of global competition and product safety requirements

6.1 Increasing competition in international markets

Many African states, particularly those in the group of LDCs, are highly dependent on exports of raw materials and unprocessed agricultural products. The terms of trade for most of these products have developed very unfavourably since the 1970s. The prices of a number of minerals are very low and, if the African countries concerned try to increase their export incomes by increasing the export volumes, the prices just go down even more. For several important agricultural export products, market access has been limited and/or the conditions for entering the market have been difficult to fulfil, see also Section 5.1.

To compete in the international market requires large investments. Production capacity and product quality must be created, improved and enlarged. Too little has happened so far in Sub-Saharan Africa, with the exception of South Africa. Compared to the markets in other developing regions, such as Asia and Latin America, Africa comes last. A general comparison is complicated, but we shall point out some essential differences.

In Africa, the middle classes are often very weak compared to the other two geographical regions. Normally foreign investors search for local co-operation partners in the countries of their interest. In Asia there is the vast Chinese network in the business community. In Latin America there are strong, traditional linkages with

Europe through common ancestors, which facilitates the situation for any direct foreign investor. In Africa such strong networks or linkages do not exist, with the exception of South Africa and a few other countries in East and Southern Africa with white settlers. After the exodus of the colonial actors and the Indian immigrants, who often had middle class status, there has been a lack of strong co-operation partners.

The development co-operation strategy for the allocation of resources to Africa strengthened the public sector rather than the private business community. The very limited middle class is based on civil servants in the public sector rather than actors in the private sector. Currently, a dramatic change is being enforced through the reduction of development co-operation funds and the implementation of liberalisation and privatisation obligations decided upon by the IMF and in the WTO. These radical changes are taking place without the necessary infrastructure, social or financial systems in place. This can be a trap, based on perceived social and even ethnic injustices, which will be difficult to get out of (Chua, 2002).

Expectations are high regarding the improved opportunities for the African LDCs to export their agricultural products to the EU and the US through the EBA and the AGOA initiatives, see Sections 5.4 and 5.5. However, the other African countries also expect to increase their exports of agricultural products. This will, however, depend on the US and, particularly, the EU to start fulfilling the liberalisation of their markets as decided in the Uruguay Round and in Doha. Africa has substantial surplus capacity where exports of agricultural products are concerned. It is important to be ready when market access conditions improve in the future, and then to be able to fulfil the SPS conditions.

There are also positive expectations on the part of developing countries to increase exports of textiles and clothes to the industrial countries. The Uruguay Round reached agreement on the elimination of all quotas in 2005. However, for several African countries, which did not have such quotas, competition will become keener. An additional problem for many countries close to South Africa is the temporary restrictions on cumulation of origin with South Africa.

To facilitate more rapid industrialisation in Africa, more liberal conditions for rules of origin and more flexible rules for cumulation of origin are needed. This will contribute to opening up exports to the EU and the US, as well as stimulating South-South trade, in particular trade within Africa.

In order to succeed, exporters have to develop attractive product quality and to satisfy requirements for product safety. Such improvements have to take place; otherwise the African countries' possibilities to compete worldwide will continue to be limited. In the following sections, we shall outline strategies to overcome these obstacles.

6.2 The Just-in-Time Export Strategy

In this section we shall outline a strategy which seems to be a basic requirement for successful export businesses. The strategy is thus part of the *desirable future*, ref. Section 4.3. The strategy is shown in Figure 4.

The development of exports is a matter of business development. It has to start with the supplier, who produces and sells his product. The product has to be competitive in the target market, with respect to quality, availability and price. While price and availability were previously more important, globalisation has resulted in a stronger focus on quality. There are many low-cost countries today, and better transportation and general logistics have improved availability.

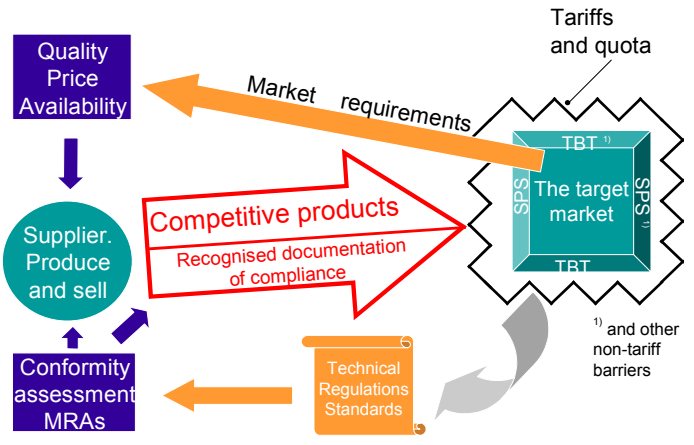


Figure 4: The Just-in-Time Export Strategy

The products target a market. Tariffs and quotas, which were traditionally important barriers, have been reduced. But technical barriers, such as requirements in respect of safety, health and the environment are growing in number and complexity.

Compliance with TBT and SPS requirements has to be documented in order for the products to gain market access. The requirements are normally given in technical regulations and standards. It is not sufficient to provide test reports, certificates, and other types of conformity assessments. The documents have to be issued by an internationally recognised institution. In this respect, the accreditation of laboratories, certification bodies etc. is the preferred method today. Mutual recognition agreements are developed between countries, but other arrangements for gaining recognition are possible.

In addition to public requirements, it is important to note that potential customers have their own requirements. Lack of compliance may exclude products from the market. Examples of such requirements may range from aesthetic or ergonomic design of industrial products, to religious requirements (e.g. halal slaughtering), to environmental requirements, to production methods (e.g. pollution or preservation of resources such as rain forests), to social accountability (child labour). The exporter needs intimate knowledge of all such requirements in the target market in order to come up with saleable products. Such market requirements may be as strong as the public requirements and are often perceived as legal by the exporter. In either case, they are quality related.

All these elements are necessary for the development of a successful export/import business. The TBT/SPS infrastructure has to be tailor-made, adapted to the export products in question. Take two examples: *Botswana* has developed a beef industry with successful exports to the EU. For this purpose, the country needs – and has developed – first-class slaughterhouses and an animal health service that comply with international standards. Another example is the export of cut flowers from *East Africa* (Kenya and Uganda). In this case pesticides of a type that is accepted in Europe are required,

as well as laboratories which can detect the very small quantities which are defined by the Maximum Residue Level (MRL).

In Figure 4, all elements need to be in place at the same time. All three groups of stakeholders defined above have to act in concert:

- Industry, agriculture and other economic operators
- Government and other public authorities
- Institutions of the TBT and SPS infrastructure.

Only then will the export initiative be successful. This is what we call the *just-in-time export strategy*. Implementation of this strategy is part of the desired future situation for exporters.

6.3 Targeted export strategies

As pointed out above, the national needs are different, depending on the export products. Figure 5 illustrates an example of a product/market matrix, which may be typical for many African countries. For the purpose of illustration, products are divided into three categories. *Commodities*, mainly agricultural products, are the traditional African products which still make up a large proportion of domestic and international trade. *Value-added industries* are normally based on the agricultural products as raw materials. Many African countries have a strategy of developing value-added industries as a replacement for commodity exports. *Minerals*, such as metals, gems and oil/gas make up the third group. TBT and SPS requirements may not be relevant for such products, where specifications are mainly a subject of negotiations between trade partners. The actors in this area are normally financially strong, often with the backing of multinational companies. Therefore, less attention is paid to minerals in this report.

The markets have been divided into three, based on geography. *Traditional markets* in Africa mean the local market, or national market. However, in recent years, regional trade has been increasing rapidly. *Emerging markets*, such as the Middle East and India, are gradually becoming more interesting. Experience gained shows

Markets / Products	Traditional Local, Domestic Regional Africa	Emerging Middle East India, etc.	Demanding Europe, USA, Japan
Commodities Agricultutal products			
Value-added prod. Processed agricult. prod. Textiles, leather, etc.			A few success stories based on *Just-in-time* strategies
Minerals Metals, gems, oil/gas			

Figure 5a: Present products and markets for developing countries

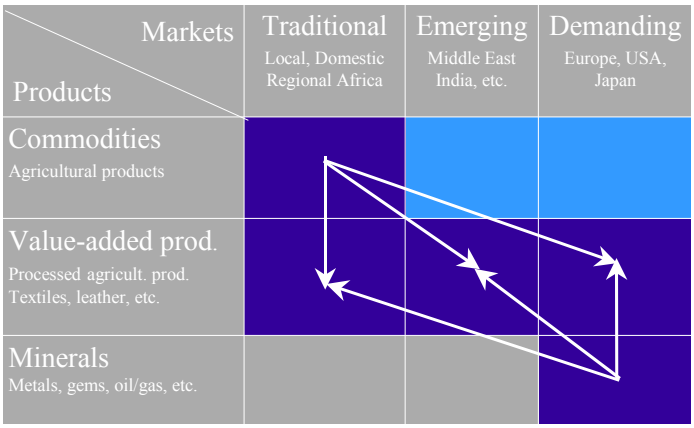


Figure 5b: Targeted export strategies

that these markets are not as demanding with respect to TBT and SPS requirements as industrialised countries. *Demanding markets* can best be exemplified by Europe, USA and Japan. These markets, notably Europe, are very important for Africa. While the requirements may be difficult to satisfy, the reward for success may be tempting.

In order to escape the poverty trap, developing countries will have to reposition their products from raw materials, exported as commodities, to value-added products. Our point is not to go into products and markets in detail, but rather to call attention to the fact that any competitive strategy has to take into account the requirements for the product in question established by the market in question. This will require *a targeted export strategy*. Implementation of such strategies is part of *the desirable future*.

Figures 5a and 5b illustrate the change in thinking that is required. Figure 5a illustrates the typical situation, where trade is limited to unprocessed commodities traded in the local or domestic market. In the future, targeted export strategies are required to develop the products as well as the markets to cater for new needs. For many countries, regional markets are more important than exports to industrialised countries.

6.4 Ensure safe products in domestic markets

Trade liberalisation opens up opportunities for export. But the elimination of trade barriers and other free trade reforms also represents a threat to domestic markets and a country's own citizens. Protection against such undesirable effects is legitimate. The situation is illustrated in Figure 6.

As tariffs, quotas and other trade-restricting measures are removed, the country will expose itself to stronger import pressure. The first challenge is to protect the country against inferior and hazardous products by proper legislation and border controls. However, experience shows that these measures are never impenetrable. At many borders, smuggling is a major problem. Legislation and a system for market surveillance is therefore required, combined with appropriate enforcement mechanisms.

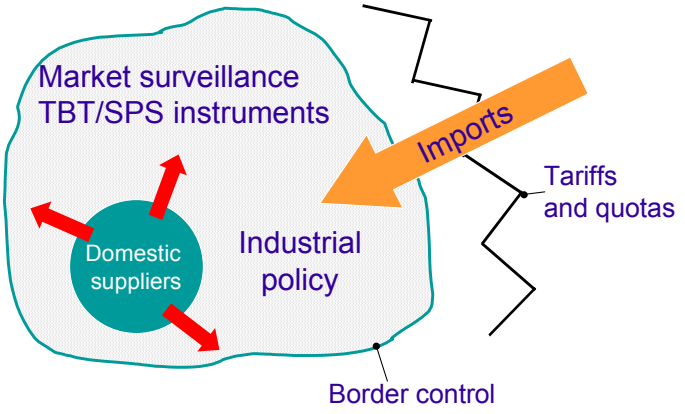


Figure 6: Ensuring safe products on domestic markets

While these measures apply to imports, the same goes for domestic production. Domestic suppliers will also have to comply with current legislation etc. WTO agreements prohibit discrimination.

Indiscriminate import liberalisation opens the domestic market to increased competition from low cost producers, notably of industrial products. There are many examples of second-grade products being dumped on markets where legitimate protective measures have not been sufficiently developed. This has resulted in the failure of many local manufacturing firms, mainly SMEs, with subsequent loss of employment. Well-documented examples from Africa and elsewhere have been compiled by SAPRIN (2002).

In order to counter this threat, trade liberalisation should be accompanied by the implementation of an industrial policy, which addresses the domestic structural constraints that cause inefficiency in order to enhance the competitiveness of domestic industry. The pace and sequencing of trade reforms should be adjusted to the industrial policy in order to maintain a ”level playing field” and allow local players to develop as competition becomes stiffer.

7. Quality and product safety in Africa – the present situation

7.1 Industry structure, export products and organisation

Agriculture and, to some extent, fisheries are by far the most important economic sectors in all Sub-Saharan Africa. The sectors often account for 30–45% of GDP, 60–85% of the work force and have by far the greatest potential for growth in the export markets. Already now, at this stage of development – with all the constraints the products meet in export markets – the sectors account for up to 90% of exports from some countries. Overall, agricultural products account for 35 – 40% of the exports, see Section 5.1.

The other important product group is extraction of minerals and other natural resources: petroleum products, diamonds and other gems, metals. As stated in Section 4.1 above, these products are outside the scope of this report.

Finished goods represent about 20% of total exports, mainly for the regional market.

There is a great potential for increasing exports. Many countries have very favourable climate and other natural conditions. Modern production methods will increase the harvests substantially. Many countries are self-sufficient where food is concerned and exports will not be at the expense of domestic food supplies.

Most African countries grow a variety of crops with a great export potential. Such products are fruit, vegetables

including spices, maize, wheat, tobacco and flowers. Vegetable protein as an ingredient in animal feed has a great export potential.

Many countries have also a great potential for increasing livestock production, and thus for becoming major beef exporters. Animal disease control, and facilities for hygienic slaughter and meat processing are important pre-conditions.

Fish and fish products are other commodities with a great potential for an increase in production and export. Fish from Lake Victoria (all EAC countries) and prawns from Mozambique are good examples, and these products account for an important share of the current exports from the countries in question.

Most of the exports are at present unprocessed and exported as raw materials. Many countries have a clear policy for developing value-adding industries, which in practice would mean agro-industries, freezing plants, export terminals for sorting, packing, labelling, etc. This trend is still at an early stage, but encouraging success stories can be told. Some of these, such as fish from Lake Victoria, flowers and vegetables from Kenya, beef from Botswana and Namibia and mangoes from Mali, are described in Appendix 1.

The single most important constraint for African exports of agricultural/fishery and food products seems to be SPS measures. A number of countries have experienced significant export losses due to difficulties in complying with SPS requirements. Fish exports from Lake Victoria (see Appendix 1) is a good example. For processed agro-industrial products, TBT requirements, e.g. on packaging and labelling, will also apply.

A second important constraint is weak logistics. Many agricultural products are perishable and, in some cases, a cool chain is required. But logistics is not only a matter of investment in infrastructure such as roads or coolers. Equally important is *the organisation* of the supply chain.

A third constraint is unfavourable and even discriminating trading terms with regard to exports from Africa to industrial countries. The subject is covered in Section 5.4.

Traditionally, exports from East and Southern Africa have largely been directed towards Europe, although

informal trade across national borders has always taken place. Over the last five years, however, there has been a substantial increase in cross-border trade between neighbouring countries and other countries in regions in Africa. In several countries this regional trade has taken over from Europe as the main export revenue earner.

Export marketing requires detailed information and understanding of the target markets. Small businesses will not be able to master this, due to lack of resources. The resulting lack of information may become a major constraint to the development of trade. Ways of overcoming the problem have been demonstrated by the *Kenya Flower Council* (see Appendix 1).

In order to make efficient use of the opportunities for export, clear policies and support from government are required. Many countries have set their priorities for export products, often 4 – 8 priority products. Some countries have backed their ambitions with strategies. In this respect Tanzania is a good example. Such strategies are essential for success and for establishing good co-operation with the donor community.

For the types of products discussed above, the exporters need to get organised. Smallholders and medium size farms do not have the resources to develop an export business. Only plantation farming, for example for coffee, tobacco etc. in East and Southern Africa, can attempt this.

A good example of an organisation that works well is the *Kenya Flower Association* (see Appendix 1). In Mali, the processing and export of mangoes is organised in an export company, CMDT. The *Agricultural Development and Marketing Corporation* (ADMARC) of Malawi has gone one step further. In addition to buying from domestic smallholders, ADMARC buys a wide range of products both regionally and internationally, and sells on the domestic, regional and international markets. Tanzania has investigated the concept of *Export Associations* which are similar to the examples mentioned above. It concluded that international experience is positive, and recommends the model for wider use.

In summary, there are many constraints to the development of trade and exports in Africa:

- Difficulties in complying with SPS measures
- Unfavourable or discriminating trading terms such as obstacles to market access
- Gaps and delays in the logistics chain
- Lack of precise market information and communication
- No clear national objectives and supportive government policies
- Bureaucracy in import licensing and border crossing procedures
- The strategy does not comply to the *Just-in-Time Export Strategy*.

7.2 Competitiveness of suppliers

Quality awareness and the general quality of domestic products in most African countries are traditionally low. Many countries had a planned economy in the past. Almost all countries have practised a high degree of protectionism. These are important reasons for low quality awareness. We have seen the same situation in the planned economies of the Soviet Union and the COMECON area.

The population is used to low quality products from domestic suppliers and high costs for poor quality. Therefore, domestic suppliers get away with products of poor quality. This will not be good enough for the more demanding export markets. A considerable strengthening of focus is required in order to meet requirements in emerging or demanding markets.

Process quality is also low. This is reflected in low productivity, high scrap rates in industry and post-harvest losses in agriculture. Processes are also slow, resulting in unreliable deliveries and long delivery times.

One illustrative example from agriculture, the most important sector of the economy in most African countries, is the post-harvest losses. These amount to 30–50% of the total crop and this is pure waste. But the losses also represent an important opportunity for improvement, by improving quality and productivity in the agricultural sector. Agricultural productivity can be

increased significantly with better pest management and improved farm-to-market logistics. A realistic ambition for a quality improvement programme is to reduce the losses by 50% in 3–5 years. This alone would increase the net output from agriculture by 20–50%, a substantial gain. For countries that are already self-sufficient with respect to food, the surplus could be exported and improve the economy as well as the trade balance.

One general problem is the poor understanding of current international requirements. This goes for public services as well as export organisations and the private sector. The requirements are partly product safety requirements in target markets, based on WTO/TBT and SPS requirements. In addition, the commercial requirements of potential customers have to be met.

The World Bank has published an in-depth study *Standards and Global Trade: A Voice for Africa* (World Bank, 2003). The report claims that "by participating in international standards, and implementing acceptable international rules, it is estimated that Africa could gain up to 1 billion USD a year from higher exports of nuts, dried fruits and other agricultural commodities."

Chambers of commerce and industry are often aware of the problems described above. They make a determined and very important effort to improve awareness through information and training.

Another focal point is the National Standardisation Bodies (NSBs). In countries where these are well developed, they create awareness and provide training in methods to overcome quality, product safety and productivity deficiencies. Some NSBs have very close links to government and may not be fully aware of their role in promoting the private sector. In such cases it is necessary to develop better contacts with industry and agriculture.

There are exceptions to this rather gloomy picture. Some examples of successful export projects are described in Appendix 1. In these cases, the entrepreneurs have worked according to the strategies outlined in Chapter 6. Even if there are still only a few examples, they illustrate that it is possible to change the present situation.

7.3 The TBT infrastructure

General

The TBT infrastructure consists of institutions for standardisation and conformity assessment. The role of the institutions is defined in legislation, which also states the national needs for protection in various sectors.

Legislation in the TBT area is highly diverse in Africa. The lack of a harmonised approach is a serious barrier to trade. Much of the legislation is old, often based on legal practices in the former colonies, and may date back to the 1950s or even further back in time. Recent additions are often *ad hoc,* and there may be overlapping or inconsistent legislation, or important gaps.

A number of countries have a reasonably complete set of general legislation, such as:

- Weights and measures act
- Product safety and liability
- Standardisation.

However, there are also important gaps. Many gaps are clear violations of the WTO/TBT agreement. The role of standards is often diffuse. The requirements for conformity assessment may be comprehensive, but often not in relation to the risk that they aim to protect against. Responsibilities are often divided and may be unclear. Enforcement may be weaker than required in order to protect society, for example in cases of border control inspection and market surveillance.

The National Standardisation Bodies (NSBs) in African countries are often integrated institutions, not limited to standardisation work. As integrated institutions, they serve as important national focal points for development of quality and participation in international co-operation.

In the following we shall comment more specifically on standardisation and some of the most important conformity assessment services. For specific data, reference is made to the table in Appendix 2.

Standardisation

Standards are normative documents, the most common type being product standards containing specifications for products. Many standards also contain specifications for testing required to verify compliance with the standard. Standards are developed by national and international standardisation bodies. The best-known international bodies in the technical area are the *International Electrotechnical Commission (IEC)* in the electrotechnical field and the *International Organisation for Standardisation (ISO)* in most other fields. Initially, standards are voluntary, but they may become mandatory when referred to in a *Technical Regulation* or in a contract between business partners. There are more than 100,000 international standards in existence. The UN/ECE has published a list of international standardisation bodies, containing 52 organisations, UN/ECE (2002)

Since the 1980s, standards for management systems, such as ISO 9000 for quality system management and ISO 14000 for environmental management, have become increasingly widespread. These standards do not set requirements for the product itself, but for the system behind product development, production, delivery etc. In this way, confidence in product quality or environmental practices may be enhanced.

The main role of the *National Standardisation Body (NSB)* is to develop and adapt standards for domestic use. The NSBs are members of ISO and many of the national standards are based on international standards.

A total of 14 countries in Africa are full members of ISO. This is a good indication that they have a good national standards body. Another 16 countries are associate or corresponding members of ISO. About 5 NSBs are not members, often because they cannot afford to pay the membership fee. South Africa has a very large and strong standardisation body, SABS.

A recent survey made by ISO (ISO, 2002) provides interesting information on standardisation in Africa. Of the NSBs, 66% are autonomous government bodies. Most of them have published few standards (< 150). They do not, or only to a small extent, take part in ISO's international standardisation work, not even by

correspondence. One third of the NSBs issue technical regulations, in addition to standards, in many cases violating the clear distinction between technical regulations and standards in the WTO/TBT agreement.

Metrology

Metrology is the science of measurement. It covers three main tasks:

1. *Scientific metrology* deals with research and development relating to the improvement of measurement techniques, leading to more precise and traceable primary level measurements. This is the highest international level.
2. *Industrial metrology* ensures the adequate functioning of measurement instruments used in industrial production and in testing. This includes traceability of measurements, from the factory floor to the highest international standards, and documentation of the accuracy of measurements.
3. *Legal metrology* concerns the accuracy of measurements used in trade, to protect health and safety or in other legal relations. The main objective is to protect citizens from the consequences of false measurements, for example inaccurate weight and measures in trade, or inaccurate measurement in enforcement of requirements to health, safety and the environment.

All countries need a system that ensures that the measurements required for production and trade are consistent and correct. This may include physical standards of industrial metrology for parameters such as length, mass, volume, temperature etc. The parameters required, the accuracy level and the geographical distribution of calibration laboratories depend on the needs of industry, i.e. the degree of industrialisation of a country. Industrial countries normally have a National Metrology (or Physical) Laboratory. In most African countries the level of industrialisation is low, and the needs are limited.

In Africa, the NSBs in many cases serve as National

Metrology Institutes. Most of the countries require further upgrading of metrological standards. A survey by SADC of 16 countries in Southern and East Africa (SADCMET, 2001) indicates that only South Africa and Kenya are at a level qualifying for accreditation[5].

The task of legal metrology is to establish fair trade by instituting accurate measurements of length, mass and volume. Regulatory control of weights, measures, petrol pumps etc. belongs to this area. At a later stage, control of other fields, such as medical, safety, traffic and environmental measurements may be considered.

Upgrading is also required in this area. A survey of the 14 SADC countries showed that only two countries (South Africa and Mauritius) were above a very basic level. The other countries only possessed simple/basic instruments for mass, volume and length of goods.

Traditionally, metrology issues concentrate on physical and technical parameters. However, the most important laboratory testing in Africa is related to testing of food, agricultural products and veterinary testing. For such testing, different needs apply. The most important needs in order to ensure correct and accurate test results are related to:

- Reference materials
- Proficiency testing
- Reference laboratories

All of these factors are weak in all parts of Africa, with the notable exception of South Africa, which can play an important regional role in all three areas.

Laboratory testing

In order to establish the facts regarding product properties, a network of testing laboratories is required. The type of laboratory needed depends on the structure of agriculture, fisheries and related processing industries, as well as other manufacturing industry in the country. Laboratories provide the basic facts for the documentation of product properties that are required for international trade.

[5] NML in South Africa is accredited for Air Pollution, Acoustics, Vibration and NDT. KEBS in Kenya is partly accredited.

The most important tests are in the SPS area (chemical and micro-biological laboratories). This is further addressed in Section 7.4.

In the technical area there is a certain amount of mechanical testing, testing of building materials etc. Most NSBs are engaged in laboratory testing. The scope varies considerably, but normally includes technical testing. Textile testing is done in some countries. Laboratory testing is often the basis for product certification.

Only a small number of laboratories are accredited.

Product certification

Certification is defined as confirmation of compliance with a requirement. Product certificates confirm that a product complies with the requirements of a standard. Such schemes are important parts of the quality and product safety infrastructure, notably in countries where market surveillance is not well developed (and this is generally the case in Africa).

Almost all the NSBs have established product certification schemes. According to ISO (2002), product certification is available nationally in 86% of the countries.

Accreditation of product certification bodies is still relatively new at the international level, but a strong demand can be expected once the International Accreditation Forum (IAF) arrangement is extended to cover this area. Product certification bodies in Africa are generally not accredited. This means that the certificates are not accepted in industrial countries, unless the customer or the authorities in the target market make specific evaluations and approvals.

Product certification is a valuable source of revenue and as such contributes to the financial sustainability of the NSBs.

Management system certification – ISO 9000, ISO 14000 and HACCP

Quality system certification confirms that *the system* of an organisation complies with certain requirements, normally as specified in the international standard ISO 9001 (ISO, 2000), and/or HACCP in the SPS area. This is not

a guarantee of product quality, but a confirmation that the organisation works in a systematic manner and in accordance with internationally recognised practices. Hence, the probability that the products comply with the requirements is increased.

Over the last 15 years, certification of quality systems has become widespread. Worldwide, 561 747 certificates under ISO 9000 had been issued by December 31, 2002 (ISO, 2003).

The number of ISO 9000 certificates, in relation to the size of a country, is a rough indicator of quality awareness. The situation in Africa is documented in the table in Appendix 2. Only a few countries have widespread certification, indicating that the level of awareness is generally low.

Accredited management system certification services are available in all African countries through international certification bodies, including the South African SABS. The problem is that these services are very expensive, and few African organisations can afford certification unless sponsored by others. Several countries have established national certification schemes as part of the NSB. These certification schemes are generally not accredited, and the certificates are of limited value in connection with exports. Mauritius Standards Bureau has been accredited as an ISO 9000 certification body by the Dutch accreditation body, RvA. The Standards Association of Zimbabwe runs certification schemes for ISO 9000 and ISO 14000 that have been accredited by SANAS.

Environmental management systems are based on ISO 14000 (ISO, 1996). In Africa, certification is still at a very early stage of development, except in South Africa (264 certificates at December 31, 2002) and Egypt (101 certificates). Other African countries report 13 or fewer certificates; in most countries the number is zero.

Certification or other forms of approval of systems for the *Hazard Analysis and Critical Control Point* (see Section 10.2) is important for agro-industries, slaughterhouses, etc. Certification of such systems is also at a very early stage. The alternative is recognition by the relevant competent authority, based on audits.

Accreditation

Over the last 20 years, accreditation has developed into the preferred method for the demonstration of competence of calibration and testing laboratories, certification and inspection bodies. Accreditation is a third-party recognition of technical competence, quality assurance and impartiality. The requirements for laboratories etc. are given in ISO/IEC 17025 (ISO/IEC, 1999) and other specialised standards.

Accreditation is voluntary but in several areas, such as food control laboratories, accreditation is in effect a mandatory requirement. In the European market, accreditation is an important condition for the recognition of test reports and certificates and avoidance of requirements for repeated testing and certification. Eventually, accreditation improves market access for the product.

National accreditation bodies are the current internationally recognised vehicles used to provide accreditation. The accreditation body itself has to obtain the recognition of the relevant international organisation, ILAC or IAF.

Many governments in the region have realised the need for accreditation. Accreditation is mentioned in NEPAD. SADC SQAM has established a separate committee, SADCA, with representation from all SADC member states, that is responsible for co-ordinating accreditation matters within the region. The EAC protocol on standardisation, quality assurance, metrology and testing states that Partner States shall adopt harmonised schemes for accreditation, and also participate in ARSO' ARAS accreditation scheme.

In Africa, the only recognised accreditation body is the *South African National Accreditation System (SANAS)*. SANAS has accredited 560 laboratories (as at December 31, 2002) and the results are internationally recognised. A few other laboratories have been accredited by the British UKAS and the Dutch RvA[6]

The regional co-operation committee for accreditation for the SADC area, SADCA, has recently been

[6] Details can be found on the websites of SANAS and ILAC, see Encl. 5.

recognised by IAF and ILAC. Mauritius has passed an Act of Parliament on accreditation, but the organisation is not yet operational. In UEMOA, a regional accreditation body is under development in the UEMOA/ UNIDO project. In other countries, initiatives have been taken to establish national accreditation bodies.

Accreditation is a typical example of a service, which depends on high levels of competence and international recognition, but where the volume of services is low at the national level. It will therefore be very difficult to establish financially sustainable *national* accreditation bodies. The natural solution is to establish a regional accreditation body. This strategy has been taken up by SADC and ostensibly also by the EAC.

Technical assistance in the TBT area

There is a substantial range of projects, ongoing or recently completed, on *Trade Related Technical Assistance (TRTA)* in the TBT area. This project has not attempted to map all these efforts. However, we shall give a number of examples that illustrate some of the approaches.

– *UNIDO* is the UN body dedicated to industrial development and has a separate unit for quality, standardisation and metrology. UNIDO has been active in the field of standardisation, metrology and conformity assessment for more than 30 years. In recent years, UNIDO has completed a successful development project for the Uganda National Bureau of Standards (UNBS) 1996 – 2000. UNIDO is currently managing a major project for the UEMOA countries (see Section 7.5) and has proposed a similar project for the remaining ECOWAS countries. It has supported SADC in the development of the SQAM structure (see Section 7.5) and proposed a further extension.
– *Joint Integrated Technical Assistance Programme in Selected Least Developed and other African Countries (JITAP)*. JITAP aims to help African countries to participate more effectively in the multilateral trading system and improve their export competitiveness. This is a joint WTO, UNCTAD and ITC programme that started

in 1998, managed by ITC[7]. Eight African countries participate: Benin, Burkina Faso, Côte d'Ivoire, Ghana, Kenya, Tanzania, Tunisia and Uganda. In a second phase eight more countries were included:Botswana, Cameroon, Malawi, Mali, Mauretania, Mozambique, senegal and Zambia. JITAP combines studies of export and market potential for each of the participating countries.

– *Integrated Framework.* This is a joint programme by IMF, ITC, UNCTAD, UNDP, World Bank and the WTO, led by the World Bank. The programme was started in 1997 and suffered in the early years as a result of poor funding and operation. It was revamped in 2000 and is now addressing 11 LDCs, including several in Africa. One of three key elements in the IF is co-ordination of TRTA amongst donors. The IF is closely related to participating countries' PRSPs. In an early phase the IF paid attention to quality and product safety issues. Curiously, this focus has not been maintained after revamping. The real effect of the IF still remains to be proven.
– *WTO* operates a TRTA programme based on requests from members. After Doha, the number of requests has increased dramatically.
– *ISO* has 100 members from developing countries, out of 140 in total. ISO DEVCO, the committee for developing countries, promotes standardisation and quality development in general. ISO DEVCO also operates large-scale training programmes for ISO 9000 and ISO 14000 quality and environmental management systems.
– *The EU* operates the extensive MED A TRTA programme for the Arab states in North Africa. The programme supports development of technical regulations, standardisation and conformity assessment, as well as development of quality management and innovation in industry (budget USD 15 million).
– *The Commonwealth Secretariat and ITC* has carried out a joint, in-depth study of TBT and SPS needs for

[7] JITAP is sponsored by a number of bilateral donors, including Sweden and Norway.

Kenya, Mauritius, Namibia and Uganda (plus Jamaica and Malaysia). ITC (2003) The objective is to identify the technical assistance needs of developing countries in respect of TBT and SPS by analysing the six case studies and drawing conclusions applicable to developing countries in general.

- In terms of *bilateral programmes*, Sida has been active in standardisation (Tanzania, Namibia, Mozambique). Germany has been active in metrology (Kenya, Nigeria etc.).
- More information can be found in the WTO/OECD report on TRTA and capacity building (WTO/OECD, 2003) and in the WTO/OECD database on TRTA (http://tcbdb.wto.org). The database is an important contribution to the co-ordination of TRTA, which is essential for efficient utilisation of the scarce resources in this area.

7.4 The SPS infrastructure

General

Existing resources in the entire SPS area are scarce and scattered, and co-ordination systems are weak at all levels.

Most African countries lack a SPS policy that takes into account the risk-based and multi-disciplinary aspects of food safety and other SPS issues. Co-operation and co-ordination between the many ministries, agencies and other stakeholders involved in this area are absent, with no holistic and integrated approach of their services along the entire food chain. In the food safety area alone, the responsibilities may be shared among up to six ministries and many more agencies and institutions, resulting in duplication or triplication of effort, the waste of scarce public funds, conflicting interests and disorientation of the many stakeholders. The present structure also causes problems in relation to who is the *Competent Authority* (CA) – an essential element in the administrative structure. Trade partners will never accept unclear lines of command. Existing resources in the entire SPS area are scarce and scattered, and co-ordination systems are weak at all levels.

The current splitting and overlapping of responsibilities in the sector seem to be the major constraint to progress in SPS/food safety development. It is important that all ministries and agencies involved work in an integrated and co–ordinated manner to ensure adequate controls of all aspects throughout the food chain and to maximise limited resources ("stable to table approach").

No doubt, Africa has adopted its outdated food control systems from developed countries – systems that are not risk based, that are fragmented between many participants and that do not have a food chain approach. In industrial countries, the systems are currently being replaced by risk-based systems with a "stable to table" approach. Africa should follow this approach.

The risk analysis process comprises three parts:

1. *Risk assessment.* A scientifically based risk assessment is the foundation of the advice given by an independent scientist/scientific body, and should include the *identificatio*n and *characterisation* of the hazard and a qualitative and/or quantitative *estimate of the risk* including attendant uncertainties.
2. *Risk management* is the process in which the regulatory authority weighs up policy alternatives, considering risk assessment and other relevant factors for health protection and for the promotion of fair trade practices.
3. *Risk communication* is exchange of information and opinions throughout the risk analysis process concerning risk, risk-related factors and perceptions of relevant stakeholders.

Scientific risk analysis shall be applied to the entire food chain as a holistic approach, as illustrated in Figure 7. A *Hazard Analysis and Critical Control Point* (HACCP) is the recommended method. HACCP is explained in Section 10.2.

Legislation, regulations and standardisation

Laws, legislation and enforcement manuals etc. are outdated and do not have the holistic/food chain

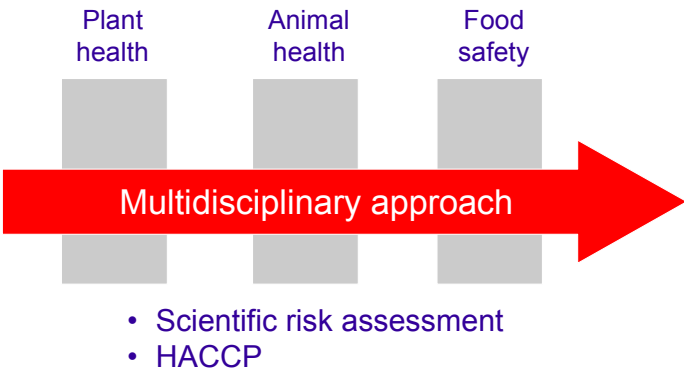


Figure 7: The food chain approach

approach currently being introduced internationally. The legislation is not prepared for flexible adaptation, in order to keep pace with new technology development, emerging hazards, changing consumer demands and new requirements emanating from the SPS agreement.

Most of Africa's 53 countries are member of the three SPS "sister-organisations" that develop international standards. The membership detail can be found in Appendix 2:

- Codex Food safety 49 countries
- OIE Animal health 47 countries
- IPPC Plant health 26 countries

Implementation of the requirements adopted by Codex, OIE and IPPC is far from satisfactory. This poses considerable difficulties for participation in international trade for the countries concerned. Harmonisation of laws and regulations, including implementation of international standards in the SPS area, is an essential prerequisite for regional and international trade liberalisation in agriculture/fish/food products.

Enforcement

During recent years there has been a considerable international effort to strengthen the infrastructure required for modern and integrated control along the entire food chain. In African countries, little or no such integrated efforts have been implemented.

There is a general weakness in SPS management resulting from unclear responsibilities due to shared responsibilities in the same sector, as pointed out above.

Another weak point is the close contact that exists between politics and technical expertise in cases where the SPS is administered directly from the ministries. All technical aspects of the SPS enforcement system should be placed outside the ministries and be organised independently of the politicians and in a co-ordinated manner. For the food safety area, the establishment of *one* agency should be given top priority.

Enhanced communications and timely access to relevant information between local and central systems, and between governments, are essential. A majority of the countries lack a system for early warning/rapid alert in the whole SPS area when pests, diseases or unsafe food are detected. Transmission of information and instructions between front liners and central headquarters is essential in the case of emergencies. Inadequate information infrastructures in the form of computers and telecom equipment are the main reasons for the weak information flows.

Border inspections and quarantine services are often non-existent, mainly due to the fact that border stations lack the tools and skills to apply effective SPS measures.

Laboratories

SPS diagnostics and food safety laboratories are rare in Africa, with the exception of South Africa. The many ministries, agencies and institutions sharing responsibilities in the SPS area all have their own laboratory systems, which suffer from limitations in funding, equipment and trained personnel, resulting in limited capacity to perform even the most basic analyses. Due to this,

there is very limited capacity to analyse important parameters such as pesticide residues, veterinary drug residues, chemical contaminants including PCB, dioxins and heavy metals as well as mycotoxins, which are all essential to a number of potential export commodities (cashew nuts, coffee etc) and emerging food-borne pathogens.

Except for a very small number of SPS-related laboratories in the region, none participate in inter-laboratory testing, have not implemented quality assurance systems and are not internationally accredited – all requirements for future documentation for export to Europe and many other global markets. The only accreditation body in the region is located in South Africa, see Section 7.3.

In some countries, laboratory support developed for one segment of the "SPS family" (fish laboratories in the East African countries/Mozambique, and meat/animal health labs in Botswana) has been established or improved independently of the other "family-members" which still have no access to updated laboratory support, although it exists in the country.

Capacity building and academic support

Training systems for all staff in the SPS systems are weak or non-existent in most of the countries visited. Improving skills through the training of all staff (management, inspectors, laboratory-veterinarians) should be given the highest priority with a focus on risk management, modern inspection philosophy, i.e. internal control based on HACCP and/or other safety assurance systems. Guidebooks for the inspection/laboratory staff should also be developed.

SPS agencies pay little or no attention to the distribution of information and advice to all relevant stakeholders along the food chain.

The capability and/or capacity to perform risk analyses, including scientific-based risk assessment in food safety, plant pest and animal health, are scattered or non-existent in institutions attached to government agencies.

Specific animal and plant health considerations

The disease status of livestock is not known due to a lack of surveillance programmes. In this situation, risk assessments/risk analyses are practically impossible and therefore international trade in meat and meat products suffers. Statistics on livestock are not reliable, posing difficulties for the design of programmes for animal health management. Animal disease control programmes, including vaccination programmes, are lacking mainly due to a shortage of funds for the purchase of vaccines, veterinary drugs, diagnostic sera etc. Some OIE list A diseases occur sporadically in a number of African countries, including foot and mouth disease (endemic), African swine fever, Newcastle disease and contagious bovine pleuro pneumonia (CBPP)

The standard of the phytosanitary service seems to have declined over the last decade in a number of African countries, resulting in the introduction of new pests due to uncontrolled movements and imports of plant materials. The capacity to provide services to the farming community appears to be more limited due to a shortage of facilities and funds. Recognising the role played by crops in the region, it is important to pay attention to crop protection management. Also the phytosanitary area lacks pest surveillance programmes, thereby making risk assessment/risk analyses impossible. During recent years, some countries have experienced incidence of exotic pests such as coffee berry disease, larger grain borer and cassava mosaic disease.

Technical assistance in the SPS area

Many African countries have been given technical assistance to overcome specific problems in the SPS area. Legal frameworks and control systems, laboratories and the supply system have been improved according to needs in relation to exports of certain commodities – sometimes with great success. A number of examples are included in Appendix 1.

Two large EU-sponsored programmes related to pesticides and fisheries respectively, and a large USAID-

sponsored programme supporting the development of an SPS infrastructure, are described in the next section.

7.5 International co-operation

Participation in international standardisation

African countries do not take an active part in the development of international standards, with the exception of South Africa. Such participation is very costly and beyond the means of the NSBs. Regarding industrial products, one may also question the need for such participation, since none of the countries are exporters of industrial products. Nevertheless, participation in organisations such as ISO would be of benefit to the more general ideas of standardisation, including implementation of international standards in Africa. As we shall see in Chapter 11, this is one of the principal elements for the removal of technical barriers to trade through harmonisation of standards.

Standards in the SPS area for agricultural and agro-industrial products are of principal concern to African countries. Participation in this form of standardisation ought to be a priority. However, their participation is limited, both in terms of numbers and effectiveness. This is partly due to the high cost of participation, as well as the shortage of experts in relevant areas. Access to experts who are qualified to take part in scientific arguments is an important limiting factor. As a consequence, the industrial countries, and their needs and experience dominate the standardisation organisations, Codex, OIE and IPPC.

The standards developed under such circumstances may partly be considered as inappropriate for use as a basis for SPS measures in Africa. It is of utmost importance that African countries participate more actively in this work, especially in committees handling products and in issues of great concern and importance for their countries.

Regional standardisation organisations in Africa

Regional standardisation co-operation is organised through ARSO, COMESA, SADC and EAC. In the following we shall briefly review some of these efforts. Reference is also made to Section 5.4.

Regional co-operation in setting standards in the SPS area has been working successfully for years through the regional co-ordinating committees under the three "SPS-sisters" (Codex, OIE and IPPC).

The *African Regional Organisation for Standardisation (ARSO)* is the regional organisation for Africa and is, as such, a parallel organisation to the European CEN. ARSO was established in 1977 and has 20 countries as members, represented by their National Standardisation Bodies (NSB). Its headquarters has been in Nairobi since 1981. ARSO is an observer at Codex and has links to International Telecommunications Union (ITU). ARSO co-operates with regional organisations such as EAC, SADC, COMESA and UEMOA.

The original objective of ARSO was to account for the needs of developing countries with respect to standards. This was subsequently taken over by ISO, notably as ISO DEVCO developed a greater interest in developing countries. But ARSO is still a political factor in Africa. The organisation promotes standardisation, including conformity assessment and the establishment of new NSBs in Africa. ARSO is currently revising its strategies in order to strengthen its future posistion.

SADC has developed a separate *SADC SQAM protocol* (SQAM = Standards, Quality Assurance, Accreditation and Metrology), which was adopted in 2000. The objectives of the protocol "..... *shall be the progressive elimination of TBTs amongst the Member States and between SADC and other regional and international trading blocks, and the promotion of quality and of an infrastructure for quality in the Member States."*

For the purpose of implementing the protocol, SADC has established five working groups. These are:

- SADC SQAM Expert Group (SQAMEG)
- SADC Co-operation in Measurement Traceability (SADCMET)
- SADC Co-operation in Legal Metrology (SADCMEL)
- SADC Co-operation in Standardisation (SADCSTAN)
- SADC Co-operation in Accreditation (SADCA)

SQAMEG co-ordinates the regional activities and provides the link to the Committee of Ministers responsible for trade, through the directorate responsible for industry and trade.

The SADC protocol on SQAM entered into force in 2000 and all the committees are active. It is important to note that all working groups – except SQAMEG – are open to observer status participation or associate membership. In this way, regional co-operation may be extended beyond the SADC area. The recommendations of the working groups have been used as basis for some of the recommendations in this report.

The *East African Community (EAC)* member states are Uganda, Kenya and Tanzania. EAC was established soon after independence, in 1967, but collapsed in 1977. It was revived in the 1990s and now concentrates on trade development measures.

The new EAC Treaty was signed on November 30, 1999. Chapter 13 of the Treaty concerns co-operation in standardisation, quality assurance, metrology and testing. The advantages of co-operation in these areas are endorsed, and the Partner States agree to apply a common policy in these areas as well as to conclude a separate protocol.

Chapter 18 of the Treaty is about agriculture and food security. The Partner States agree to co-operate in a number of areas. Adoption of internationally accepted quality standards for food processing, joint programmes for control of animal and plant diseases, co-ordinated import and export of agricultural commodities are specifically mentioned. Further measures related to plant and animal disease control and to food security are stated in Articles 108 and 110.

The EAC *Protocol on Standardisation, Quality Assurance, Metrology and Testing* was signed on January 15, 2001. The protocol advocates harmonisation of standards and conformity assessment procedures. It also asks the Partner States to adopt ARSO standards where applicable, and to participate in the African Regional Accreditation Scheme (ARAS) established by ARSO.

Regional development projects

In the SADC area, USAID established the *RAPID project* (Regional Activity to Promote Integration through Dialogue and policy implementation) in April 2000. This is a comprehensive programme with the aim of enhancing competitiveness and export capacity in SADC. Development of the SPS infrastructure is one of five main target areas. The programme is continuing with the same target areas under a new designation: *Southern Africa Global Competitiveness Hub*. Two new *Global Competitiveness Hubs* were opened in Nairobi, Kenya and in Accra, Ghana in 2002/2003. Several reports are available at the www.satradehub.org website, see Appendix 6.

Some regional programmes of co-operation in the SPS area have been in operation for years through the regional co-ordinating committees under the three "SPS-sisters" (Codex, OIE and IPPC).

UEMOA has agreed on a *Common Industrial Policy,* which, as a core element, foresees a *Regional System for Accreditation, Standardisation and Quality.* A three-year development programme started in the first quarter of 2002 with a budget of • 12.5 million, financed by the EU. Most of the project is being implemented by UNIDO.

The global objectives of the programme are to:

- Contribute to the regional integration process of UEMOA,
- Implement a regional accreditation and certification system,
- Enhance and harmonise standardisation,
- Develop quality awareness in industry and enhance the provision of quality services.

While the programme is primarily directed at the manufacturing industry, the programme should also benefit agriculture and agro-industries, which are very important in the UEMOA countries.

The EU has taken new initiatives in the SPS area by launching two important programmes with the aim of improving access to the European market for agriculture/

fishery products from developing countries: the *Pesticide Initiative Programme* (PIP) and *Strengthening Fishery Products Health Condition* with a total budget of • 75 million. The goal of the programmes is to support ACP countries in the development of their SPS infrastructure in the fishery and horticulture sectors in order that they can gain access to the European market with their products. The duration of the programmes is five years, starting 2001/2002

8. A desirable future and the challenge to get there

There is every reason to speak about challenges for Africa – and within Africa – when it comes to incorporating Africa in the global trading system. Africa is confronted with vast problems and far-reaching demands. Some principal challenges are:

- Development and supply of competitive products for the world market, in Africa and elsewhere,
- Compliance with all obligations related to various WTO agreements,
- Negotiation and implementation of a new EU trade policy in Africa,
- Implementation of the new US trade policy, based on the AGOA acts,
- At the same time, COMESA, SADC, UEMOA and ECOWAS are on the way to deepen their concepts for free trade and industrial integration etc. in their respective geographical areas.

NEPAD sums up many of these challenges, both with respect to developing the trading regime and developing a private sector that is capable of offering competitive and attractive products on the world market. A positive outcome for NEPAD is essential.

The challenges do not only refer to Africa, they also refer to industrial countries. Vast amounts of development support and foreign direct investments are needed.

Over the last ten years there has been a growing awareness in Africa of the need to establish regional and continent-wide co-operation to accelerate development. Nowhere have these ideas been more clearly expressed than in *NEPAD –The New Partnership for Africa's Development* (NEPAD, 2001).

In some of the subject areas of the present project, NEPAD contains remarkably specific objectives and actions. In the following we shall develop the specific objectives of this programme with NEPAD as a principal reference.

Private sector development

NEPAD introduces the Market Access Initiative as follows: *"African economies are vulnerable because of their dependence on primary production and resource-based sectors, and their narrow export bases. There is an urgent need to diversify production and the logical starting point is to harness Africa's natural resource base. Value added in agro-processing and mineral beneficiation must be increased and a broader capital goods sector developed through a strategy of economic diversification based on intersectoral linkages. Private enterprise must be supported, ..."*

Agriculture is a dominant private sector in Africa. Some of the NEPAD objectives in this area are:

- To ensure food security for all people,
- To improve the productivity of agriculture, with particular attention to small-scale and women farmers,
- To promote measures against natural resource degradation. Encourage environmentally sustainable production methods,
- To integrate the rural poor into the market economy and provide them with better access to export markets,
- To develop Africa into a net exporter of agricultural products,
- To promote access to international markets by improving the quality of African produce and agricultural products, particularly processed products, to meet the standards required by those markets.

All of these objectives will be addressed by this report. General NEPAD recommendations regarding the private sector include:

- To increase the production and improve the competitiveness and diversification of the domestic private sector, especially in the agro-industrial, mining and manufacturing sub-sectors with potential for exports and employment creation,
- To undertake measures for enhancing the entrepreneurial, managerial and technical capacities of the private sector by supporting technology acquisition, production improvements, and training and skills development,
- To promote foreign direct investment and trade, with special emphasis on exports,
- To promote intra-African trade with the aim of sourcing within Africa imports formerly sourced from other parts of the world,
- To identify key areas in export production in which supply-side constraints exist (Note: and presumably doing something about the constraints!),
- In tourism: Identify key "anchor" projects at the national and sub-regional levels, which will generate significant spin-offs and assist in promoting inter-regional economic integration (Note: and presumably doing something for developing the projects!).

Technical barriers to trade (TBT)

A number of NEPAD recommendations concern the TBT infrastructure, among them:

- To harmonize the technical regulations framework of African countries,
- To develop and accept a best-practice framework for technical regulations that meets both the requirements of the World Trade Organisation's TBT agreement and the needs of Africa. The technical regulation frameworks of the developed countries may be too complex for many African countries,

– To establish standards bureaux to provide information on international, regional and national standards, and to act as WTO/TBT enquiry points,
– To acquire membership of the relevant international standards organisations,
– To establish national measurement institutions,
– To ensure that testing laboratories and certification organisations are set up to support the relevant national technical regulations,
– To establish an accreditation infrastructure,
– To pursue mutual recognition of test and certification results with Africa's major trading partners.

Food security and SPS

Food security is an overriding objective for development of Africa. According to the World Food Summit (1996) *"food security exists when all people at all times have physical and economic access to sufficient safe and nutritious food to meet their dietary need and food preferences for an active and healthy life."* This is a wide-ranging issue extending far beyond the scope of the present project. The principal components of the concept of food security are illustrated in Figure 8.

NEPAD is by no means as specific in the SPS area as in the TBT area. We propose the following specific objectives, all anchored in a national SPS policy:

– To develop national SPS policy, legislation and regulations based on a holistic food chain approach and on risk analysis principles,
– To implement the WTO/SPS agreement. Harmonisation based on Codex, OIE and IPPC principles and standards,
– To develop a co-ordinated, national SPS enforcement infrastructure covering the whole food chain,
– To develop national or regional centres for food safety, animal and plant health, with the expertise and resources to assess relevant risks,
– To participate in relevant international organisations and other fora responsible for setting standards and acceptable risk levels.

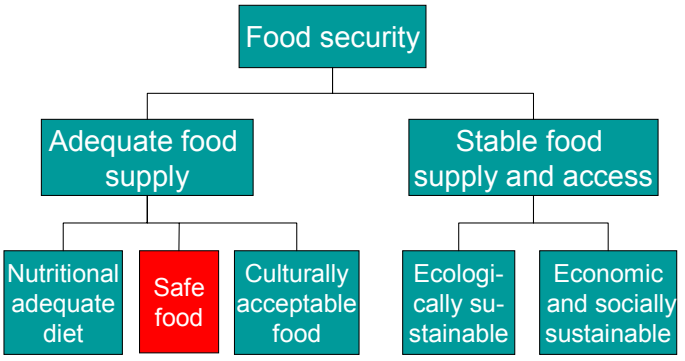


Figure 8: The concept of food security

Setting objectives in practice

In our opinion, NEPAD succinctly points to a number of essential objectives and strategies for the development of trade and for ensuring the health and safety of its citizens in this respect. Our thinking is completely in line with NEPAD.

However, we would draw attention to two additional issues. First, there are substantial differences from one country to another on the continent of Africa. An objective, such as development of trade, therefore has to be interpreted differently and adapted to national circumstances. Typical development stages may include:

- *Stage 1:* To integrate the rural poor into the market economy and national trade patterns,
- *Stage 2:* To develop trade between neighbouring countries where conditions are similar and the need to safeguard domestic markets is small or moderate,
- *Stage 3:* To develop export opportunities in emerging and demanding markets, cf. Section 6.3.

Each country has to decide where to start. There may also be differences within one country. One may see "islands" of highly developed export-focused production, operating according to the *Just-in-Time principle,* in a country that is generally an LDC.

The other issue is to balance efforts between offensive trade development and defensive strategies to ensure safe

products in the domestic markets, as discussed in Section 6.4. We propose that the programme should be seen in 3 blocks, as illustrated in Figure 9. Block 1 is the basic foundation, consisting of awareness building, creating engagement and basic training. The second building block is the domestically focused, general TBT and SPS infrastructure that is required to ensure safe products on domestic markets, as explained with reference to Fig. 6. Finally, there is the need for targeted, *Just-in-Time* export strategies in order to succeed in export markets. All these form part of *the desirable future,* see Section 4.3.

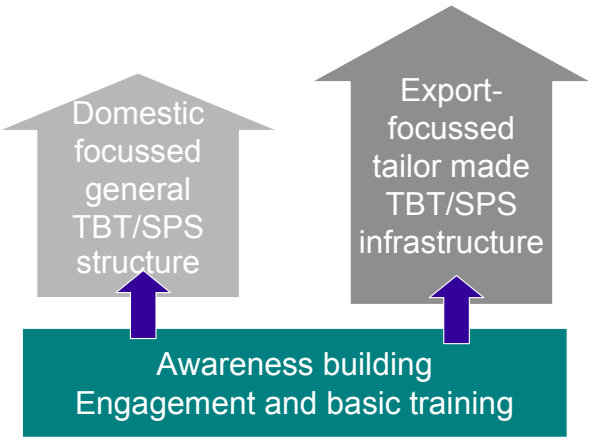


Figure 9: General and targeted strategies

The emphasis on each block will vary from one country to another. The important issue is to test proposed projects or other actions with reference to the objectives.

A national strategy for the development of trade may be the best tool for addressing these and other issues. Many African countries have already established such strategies, with good results.

The proposed international development programme is presented in Part II of this report. We shall present recommendations and indicate suitable stages of development wherever possible, while each country has to make its own decisions with respect to offensive and defensive strategies.

PART II:
An international development programme

9. Building awareness

Change will not take place unless stakeholders are aware of the need for change. And change is required in order to develop trade in Africa.

Awareness is required not only of the need for change, but also of the mechanisms of change – how to go about it in order to achieve results. And finally: to realize the need for change, stakeholders need to see what they can achieve by change. A vision of the desirable future has to be painted; stakeholders and followers have to be mobilized. Change is never easy to achieve. A strong determination and unity among stakeholders is required in order to succeed.

There is a need for better understanding, more co-operation and efficient utilisation of resources (e.g. laboratories) across the traditional borderlines between the TBT world and the SPS world. This should be attempted in connection with development of national awareness programmes and focal points.

Development in Africa also depends on North – South co-operation. The industrial world cannot leave the problems to Africa alone. There is a need to improve understanding in our part of the world of what it takes to develop African countries.

Identifying stakeholders

Developing trade is business development. The prime stakeholders belong to *the private sector business community*:

– Farmers (small and large) and their organisations
– Fishermen and fishery companies
– Manufacturing industry
– Traders and exporters
– Chambers of commerce, industry and trade
– Export associations

Politicians play an important role in setting the priorities for development efforts. There are many needs to address, and politicians must ensure that trade issues are given a fair place on the agenda. Politicians should also ensure that quality and product safety issues are given priority in negotiations between African countries and the donor community. In this respect, the Ministry of Finance often has a key role.

Politicians also direct *public authorities* such as government ministries and their professional agencies, and the provincial organisations. Public authorities set the framework for business and also develop and manage the regulations and enforcement systems in the TBT and SPS areas. Public authorities are thus an important stakeholder group.

Both the business community and public authorities have to depend on a number of institutions that we call *the TBT/SPS infrastructure*. These comprise standardisation bodies and conformity assessment/enforcement organisations such as:

– National standardisation bodies
– Inspection and auditing authorities
– Laboratories
– Certification bodies
– Metrology institutes
– Accreditation bodies

The TBT/SPS infrastructure should be organised independently of government ministries.

A final group of stakeholders is *the consumers*, who may be exposed to substandard or even hazardous products. The consumers need to have a say when deciding what is

an acceptable level of product safety. The consumers will also 'vote with their wallets' when it comes to product preferences.

Consumers need to organise themselves in order to be heard. Consumers need to see that by organising themselves they become stronger, and their points of view will gain weight. Organisations must be representative of the general public.

Among the international stakeholders, *the political level* needs to implement policies that support development in Africa. This is not only support through donor organisations, but also trade facilitation. The links between trade policy and development policy are often weak, and sometimes the efforts even counteract each other, as in the case of agricultural products.

A second stakeholder group at the international level is *the business community* who are the potential buyers of products from Africa. Awareness of business opportunities and understanding of the realities of trade with Africa need to be developed.

Recommendations at the African level:

- *Identify specific stakeholder groups and establish communication channels between them.*
- *Promote trade issues in negotiations with donors.*
- *Encourage establishment of representative consumer organisations.*

Recommendations at the international level:

- *Co-ordinate development policies and trade policies of industrial countries, and improve communication between the two communities and sector interests.*
- *Develop awareness in the business community of trade opportunities in Africa.*

National awareness programmes

Our studies have proved that the level of awareness is low in most of Sub-Saharan Africa, see Chapter 7. While there is a growing understanding of the importance of trade for economic development and poverty reduction, the understanding of the requirements and

mechanisms for the development of successful trade initiatives is poor. This goes for most of the stakeholder groups discussed above.

In order to boost awareness, there is a need for national awareness programmes in most African countries. The objectives of such programmes should be not only to create awareness, but also to provide a basic understanding of the requirements, mechanisms and benefits of trade development.

The contents of a national awareness programme have to be tailored to the country in question. Here are some typical elements, frequently found in successful awareness programmes:

- Awareness seminars, with particular emphasis on mobilising the active support and participation of top management,
- Extensive, basic training of a wide range of stakeholders,
- Establishment of organisations, such as national quality associations or standardisation bodies,
- Development of a national quality policy, which includes obtaining commitment from the national political level.

As for the tools, a wide range is available, such as:

- Benchmarking successful awareness programmes (not necessarily in the same area),
- Press and TV coverage,
- Publication of success stories (see examples in Appendix 1),
- Creation and use of slogans,
- Employment of professional communication expertise.

Recommendation at the African level:

- *Establish national awareness programmes for quality and product safety in the development of trade, including all relevant stakeholders.*

Recommendation at the international level:

– *Support national awareness programmes and provide benchmarking data in order to effectively utilise previous positive experience.*

National focal points for quality and product safety

Creating awareness of the importance of quality and product safety for the development of trade for a country often starts with fewer than a handful of people. These people normally experience an uphill battle at the start and will need all the support they can get.

A national focal point for quality is essential for sustainable development in this field. The most common example of such a focal point is a National Standardisation Body (NSB). Many African countries have NSBs that act in this way, see Section 7.3. A national focal point is essential for sustainability. It should be part of a permanent organisation. Otherwise, key persons may very well pull out due to fatigue.

A national focal point will normally develop in stages, starting with modest resources. A well-developed NSB may offer the following services:

– Voluntary standardisation,
– Information centre, including a WTO/TBT enquiry point (plus possibly a WTO/SPS enquiry point),
– Product certification (which should contribute to financial sustainability),
– Laboratory services,
– Industrial metrology (calibration), possibly the function of a National Metrology Institute,
– Quality management training and certification of quality management systems (ISO 9000),
– Environmental management training and certification of environmental management systems (ISO 14000).

Certain national focal points also offer or plan to offer accreditation services. This is not acceptable if the organisation offers laboratory services or certification at the same time, as the combination would involve a conflict of interest. Alternative organisation forms for accreditation are preferred, see Section 11.4.

Furthermore, certain national focal points offer both consultancy services and certification related to quality or environmental management systems. This is a conflict of interest situation and has to be avoided. The national focal point will have to choose its role either as a certifier or as a consultant.[8]

National focal points as outlined above are normally closely connected to the ISO system, which is mainly technical. However, African countries with mainly agricultural and agro- industrial production also need strong support on the SPS side. There is a need for a separate focal point for food safety and SPS issues. Our recommendations in this respect are given in Section 11.3.

Training is an essential element in awareness building. It is also important in other contexts. Training is therefore given a separate section, Section 11.5.

Recommendations at the African level:

- *Establish national focal points for quality and product safety. Prepare a staged development plan. Establish co-operation between the TBT and SPS areas.*
- *Watch out for – and avoid – conflicts of interest.*
- *Invest in training as proposed in Section 11.5.*

Recommendation at the international level:

- *Support the development of national focal points for quality and product safety. Make sure that sufficient resources to achieve sustainability are made available, notably in the early phases.*

[8] It is internationally recognised that certification bodies may offer open training courses without entering into conflicts of interest.

10. Developing competitive suppliers in agriculture and industry

10.1 Business development

Chapter 6 briefly described some of the implications of global competition and the need for a *Just-in-Time* targeted export strategy, meeting TBT and SPS requirements, in order to succeed in export markets. The case stories in Appendix1 illustrate the need for determined business development in order to succeed in demanding markets.

In this Chapter we develop the strategic concept one or two steps further, in order to illustrate the methodology that can be used in specific developments. We have in mind the export of agricultural or fishery products, preferably with some value-added processing, as well as agro-industrial products. The scope of this project does not include major mining, energy or industry development projects, which are usually implemented by international corporations or joint ventures.

The exporters we have in mind may be smallholders or plantation farmers. The latter group may develop export projects individually or in small groups, whereas African smallholders will need to be organised in co-operatives, export associations etc. One concept of particular relevance to the present project is the Private Sector Exporting Company (EC). This model is proposed in Tanzania, based on favourable experience from Canada, Israel, the Philippines and India (Ministry of Industry and Trade, 2002). The organisations for horticultural exports from Kenya follow similar models.

The EC concept is based on the establishment of a public or private company specializing in the export of manufactured or agricultural goods produced by SMEs or individual entrepreneurs. The EC, by combining the products of many SMEs, overcomes the constraints of economy of scale and absorbs the high costs involved in exporting by spreading them over its many suppliers. The EC provides liaison between customers and suppliers and makes sure that customer and public requirements are addressed.

The exporter, whether an EC or another form of organisation, needs to develop a strategic business plan. The plan should see the export venture as a project and observe the principles of the *Just-in-Time Export Strategy,* see Section 6.2. The starting point of planning should be a SWOT analysis. The table below illustrates some of the elements of a SWOT analysis. Note the balance between opportunities and threats; strong and weak sides. The strong sides should focus on taking advantage of the opportunities, while the weak sides should be eliminated and the threats should be countered.

Once the present situation has been mapped, it is time to set objectives and identify the gaps, see figure 3 in Section 4.2. With this as the point of departure, the strategies are developed, and Critical Success Factors (CSF) are identified. According to our studies, the following are typical CSFs:

- Develop an attractive product, including sorting, packaging and labelling,
- Check that trade agreements with the target markets will not prevent market access,
- Satisfy SPS and TBT requirements in the target market,
- Develop a logistics chain that ascertains regular supplies and prevents deterioration of product quality,
- Provide financing for the development and introductory phase,
- Offer the product at a competitive price.

There will always be a need for advisory services for entrepreneurs in order to develop a good business plan for exports.

Further discussion of business development is beyond the scope of this project, but nevertheless important for successful export ventures.

Opportunities – Market demand for tropical products – Customers in target markets want more variation – Willingness to pay	**Threats** – Low-cost competitors in other developing countries – Unjustified obstacles to market access – Unreliable trade partners in target markets
Strong sides – Favourable climate and other natural conditions – Low labour costs – Good supply of products	**Weak sides** – Difficult to comply with SPS measures – Gaps and delays in the logistics chain – Lack of precise market information- Poor communication with customers – Bureaucracy, notably at border crossings – Strategy does not comply to the *Just- in-Time Export Strategy*

Recommendations at the African level

– *Establish Private Sector Exporting Companies.*
– *Develop strategic business plans.*
– *Observe the conditions of trade agreements.*
– *Develop a strong customer focus. Identify customer requirements as a basis for product development.*
– *Observe SPS and TBT requirements.*
– *Develop a good logistics chain, including a plan for handling of contingencies.*
– *Observe the Just-in-Time Export Strategy.*

Recommendations at the international level

– *Provide professional advice on business development.*
– *Develop financing models for high-risk start-ups in co-operation between business interests and donor organisations.*
– *Identify business partners in industrial countries and assist in establishing contacts.*

10.2 Quality as a competitive strategy

General

A supplier has the choice of two principal competitive strategies:

– Low cost
– Distinguishing product and service features

With the large number of low cost countries now competing in the global marketplace, the low cost strategy is not sustainable. The price has to be competitive, i.e. offer value for money, but there must be distinguishing features, which make the products attractive in the target market. Features may be grouped as follows:

– *Product features* (e.g. fitness for purpose, durability, environmental friendliness, design)
– *Availability* (e.g. punctual and regular deliveries, short delivery time, wide distribution network)
– *Service* (e.g. confidence, communication, friendliness, reliability)
– *Experience* (The customer sees the product as an experience, which may be exotic, unusual, providing status, having a good reputation).

In addition, many customers in industrial countries set requirements to the process, notably related to protection of the environment and to social resopnsibility. The supplier needs to find out which features are important in his target market, develop product and delivery requirements accordingly, and then supply according to the requirements. Requirements will include regulatory requirements such as the TBT and SPS requirements, as well as customer requirements. Customer requirements are equally important for making the product saleable in the target market.

This customer-focused strategy is by definition a quality strategy – using quality to develop competitive advantage. The advantages will show up in business results in two ways, which will both have positive effects on business results:

- Selling attractive and safe products will increase revenue and develop loyal customers,
- Delivering products according to requirements, without errors or deficiencies, will reduce the costs of poor quality.

The core issue is *How to manage for quality?* The concepts of quality management have developed over almost 100 years. Figure 10 illustrates some of the most important steps. The time scale refers to the United States and Europe. Africa may take advantage of some of this experience, supplemented by new developments.

The most important general development strategies for quality management in Africa will be:

- Quality management as a part of awareness programmes
- Extensive training
- Access to consultants
- Development co-operation with demanding customers

A number of more specific strategies are outlined in the following sub-sections.

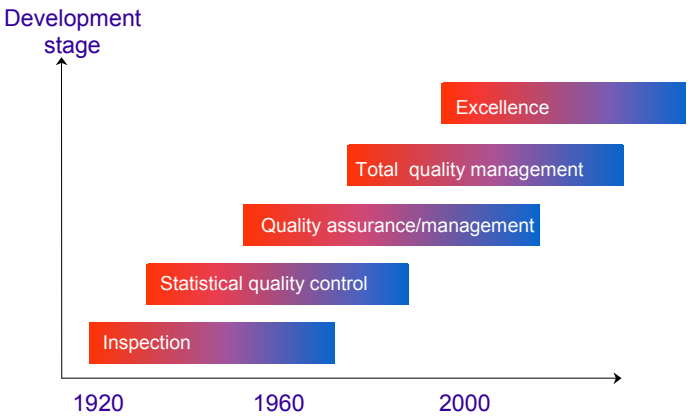


Figure 10: Evolution of quality concepts

Market-focused product development

Customer focus is *the* most central issue in quality management. Suppliers who fail to understand customer needs and supply products that meet those needs will not be able to sell their products. On the other hand, good understanding and the ability to change on the basis of customer preferences may result in important competitive advantages.

The methodology for developing new products, or a new generation of an existing product, is well developed. The principal steps are the following:

- Identify the customers. Normally, there are several customer groups with different needs.
- Discover customer needs. Investigate the needs for each customer group. Product safety requirements are part of those needs.
- Develop a product which meets the needs of all customer groups (as far as possible).
- Develop a process that can deliver the product, without errors and deficiencies, and satisfying environmental and social requirements.
- Transfer the process to operations.

This way of thinking should be introduced at every opportunity, since it is the key to success in the market.

Quality and product safety control

Controls of quality and product safety are a basic part of quality management. In trade, customers expect that the supplier works in a systematic way to ensure quality and product safety. The task is to control the processes that transform raw materials into finished products, be it an agricultural or an industrial process. The principles are illustrated in Figure 11.

Process control starts by defining objectives – how to meet the requirements of customers, regulatory authorities and others (see the previous sub-section). The objectives are translated into specifications, and plans for the execution of the process are prepared. Implementing the process is the job itself: growing agricultural products, transportation, storage, processing, etc. Inspection and

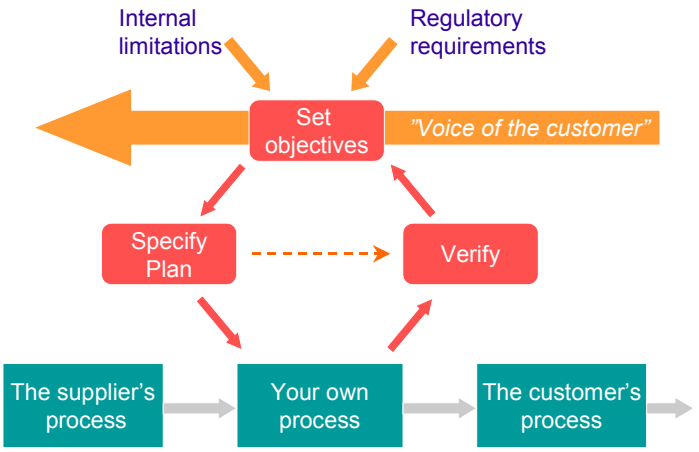


Figure 11: The process control loop

testing is carried out throughout the process. Reports are compared to specifications; the check is called *verification*. If everything is OK, the control loop can be closed. If not, the non-conformity has to be corrected.

Traditionally, control was exercised by inspection of the finished product, and this is still important. Statistical methods are useful in this respect. But when non-conformity occurs regularly, the process needs improvement in order to prevent future problems. Improved process planning is the answer, and the principles of continuous improvement should be used, as explained in the next sub-section.

The introduction of process control, often by means of inspection and verification, is a natural first step in quality management. Customer focus should be kept in mind as explained above. Later on, improved process control will shift attention from inspection to prevention.

Systems for continuous improvement

There is a lot to be gained by continuous quality improvements. As an example, Section 7.2 shows the very large post-harvest losses that are common in most African countries. By reducing the losses through quality improvement, the net output from agriculture may be increased by 20–50%, and this will be a real profit.

Post-harvest losses are an example of the *cost of poor quality*. The general concept is illustrated in Figure 12. Investments in prevention and appraisal (testing, inspec-

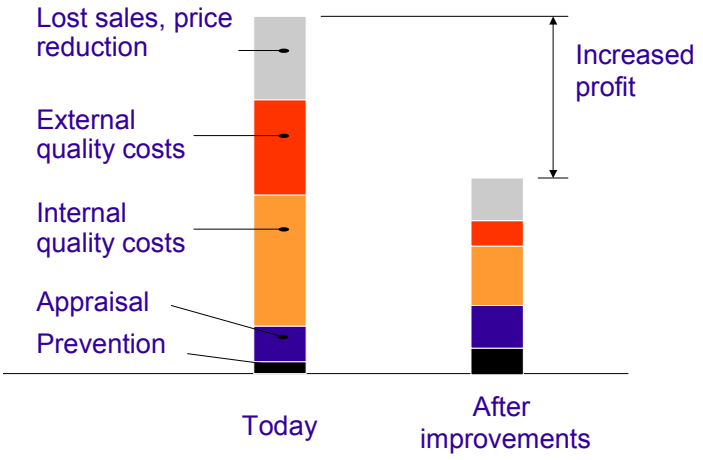


Figure 12: The cost of poor quality

tion, verification etc.) result in reduced internal and external quality costs, and in a reduction of lost sales.

There are many ways of improving quality and product safety. It is common to distinguish between:

- Small-step improvements to existing processes. Problem-solving methods, where you start with the symptom, find the root cause and then remove the cause, are most useful.
- Breakthrough improvements such as new products, new technology or new organisation forms.

The combination of various forms of improvement will take the organisation towards its vision. The concept is illustrated in Figure 13.

Continuous improvement is probably the quality management concept that will give the most immediate financial results. There are many examples in Africa of successful improvement projects and the methodology should be further promoted.

Quality management systems – ISO 9000

The concept of management systems is explained in Section 7.3. The most widespread form is quality management systems according to ISO 9000. Certification of

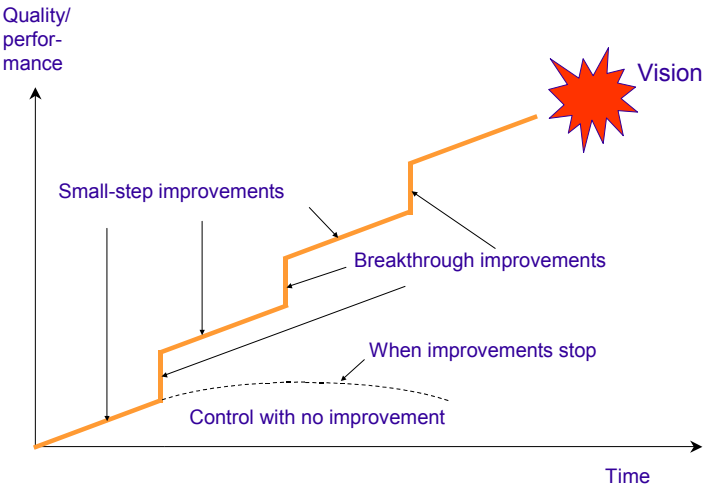


Figure 13: Improvements in many forms

such systems has now reached more than 560 000 certificates worldwide.

Quality management systems incorporate the three elements of quality management that have been described above: market-focused product development, quality and product safety control and continuous improvement. The essence of quality management systems may be summarised as follows:

- You should plan what you do
- You should do what you plan
- Inspect and verify what you have done
- Prevent further mistakes
- Learn from your experience
- Improve your processes.

As a result, you will get a predictable system for the direction and control of your own activities.

For organisations with little or no experience of systematic quality management, the entire ISO 9000 system may be too much at one time. These organisations should introduce a more limited system in *Stage 1*, directed at process (operations) control and management involvement. As soon as the processes are reasonably under control, systematic quality improvement should be started.

Environmental management systems – ISO 14000

Customers and society at large are steadily becoming more concerned about protecting the environment. As a consequence, attention to environmental management systems is increasing. However, developments are still in an early phase, as pointed out in Section 7.3. ISO 14000 is the dominating international standard for environmental management. The standard, and its principles, are very similar to ISO 9000.

One important difference from ISO 9000 is the requirement to identify the environmental aspects of the organisation's activities, products and services and determine the impact of these aspects on the environment. Such aspects should be the subject of controls, very much as described for quality and product safety.

Customers in demanding markets are steadily becoming more environmentally conscious, and exporters to such markets should carefully consider introducing environmental management systems.

Safety control systems – HACCP

The *Hazard Analysis Critical Control Point* (HACCP) has become the internationally accepted approach for assuring the safety of food – strongly recommended by Codex. The HACCP system is a tool used to assess hazards, estimate risks and establish specific control measures that eliminate risk or reduce it to an acceptable level. HACCP emphasises prevention and control rather than end product testing and traditional inspection methods. The principles are very much in line with the quality management principles outlined above.

HACCP may be combined with other management systems such as ISO 9000, ISO 14000, Good Agricultural Practice (GAP), Good Manufacturing Practice (GMP) and Good Hygienic Practice (GHP) to form an integrated management system. This will no doubt result in greater focus on risk management by the producer or processing plant. It will also promote more effective control by the authorities, putting the emphasis on audit and training rather than on physical inspection and laboratory analysis of end products or consignments. But it does not completely eliminate

the necessity of final product inspection as verification.

The introduction of HACCP systems in slaughterhouses, agro-processing plants etc. is an essential element in the infrastructure required for acceptance in export markets. At the same time, the systems contribute to reducing the cost of poor quality. An accredited certification body should certify the systems, or alternatively the systems may be approved by the food control authorities based on a system audit.

Benchmarking

Benchmarking is a systematic method for learning from other organisations that represent best practice. Benchmarking has a significant potential in developing countries, since the method produces rapid improvements.

Successful export initiatives are natural subjects for benchmarking. There is a lot to learn, not only from the success, but also from the problems that arise along the way.

Internationally, several centres are available to support benchmarking data. For developing countries, *The Competitive Edge,* a tool developed by ITC, allows small and medium-size businesses to benchmark their trade-related performance and identify areas for improvement (ITC, 2001).

Excellence and quality awards

In highly competitive industrial economies, quality awards and the excellence models upon which they are based have become important development and measurement tools. In Europe and in Africa, the most commonly used model is the *EFQM Excellence Model* (EFQM, 2000). EFQM is the European Foundation for Quality Management. The model is shown in Figure 14.

The model is very useful for creating awareness of quality and management issues, but it requires a certain level of understanding at the outset. The model may be useful for companies that compete in demanding markets and want to compare their practices and performance with relatively advanced companies.

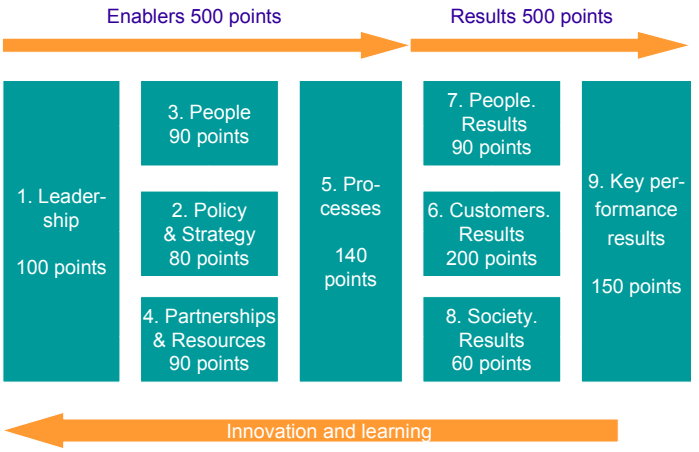


Figure 14: The EFQM Excellence Model

Recommendations at the African level

- *Make use of well-established quality management methods for the development of organisations, products and processes.*
- *Maintain customer focus at all times*
- *Be aware of the growing concerns about protection of the environment and social responsibility.*
- *Start with basic, unsophisticated methods such as process control and continuous improvement.*
- *Involve management from the beginning.*
- *Invest in training.*
- *Listen to customers regarding needs for management systems and certification.*

Recommendations at the international level

- *Promote quality management development.*
- *Provide extensive training.*
- *Establish business-to-business co-operation to promote improvement and for benchmarking.*

11. The quality and product safety infrastructure

11.1 Legislative strategies

WTO membership is a good platform for participation in the global trading system. Most African countries are members of WTO, see table in Appendix 2. Participation in WTO puts obligations on the member countries to comply with the relevant agreements. In the quality and product safety area, the TBT and the SPS agreements stand out. The agreements are briefly described in Section 5.3.

In addition to taking care of its international obligations, each country has to ensure safe products in its domestic market. The instruments needed are described in Section 6.4.

Furthermore, the general legislative framework should facilitate trade and economic efficiency on the part of the private sector. Regulations should not be more extensive or complicated than necessary. Enforcement and conformity assessment should be straightforward and bureaucracy avoided. This will also reduce public costs.

Finally, there is a need for a supporting infrastructure (scientific support, laboratories, certification bodies, etc.) that provides services for public authorities and the private sector, to ensure that the system is economically efficient.

These are criteria for the development of a quality and product safety infrastructure that represents the best regula-

tory practice internationally. It takes account of the NEPAD statement that *the technical regulation frameworks of the developed countries may be too complex for many African countries.*

On the basis of this general background, we propose a set of strategies for development of the quality and product safety infrastructure.

General strategies

1. *Regulate only when risks are significant.*

   In food safety and other parts of the SPS area, the principles of risk assessment as a basis for setting regulations are well established, as will be further explained in Section 11.3. Only when the risk assessment provides a scientific basis for regulations, should protective measures be taken.

   In both the SPS and in the technical area, *the proportionality principle* applies. According to this principle, measures taken should not be more restrictive than necessary to fulfil a legitimate objective, taking the relevant risks into account. Furthermore, an economic cost-benefit analysis of the effects of regulations, however crude, may point to areas where regulations are not justified.

2. *Limit national legislation and regulations, make use of international standards.*

   Traditionally, national legislation and regulations have led to different practices in different countries, which constitute important barriers to trade. Harmonisation between countries should be attempted, but experience gained from traditional methods is disappointing. The solution recommended in both the TBT and the SPS agreement is to make use of international standards. In a sub-section below, we present a model that demonstrates how this may be done in practice.

3. *Balance regulation and enforcement.*

   Once a regulation has been set, it should be enforced. There is no use in having extensive and sophisticated regulations, if a lack of resources does not allow proper enforcement. In such cases, simpler regulation, with low-cost enforcement, would provide a more effective solution.

4. *Simplify conformity assessment procedures.*

   Many conformity assessment procedures, such as repeated testing, or certification requirements, may constitute important and costly barriers to trade. Simplified procedures are therefore encouraged.

   In modern regulatory practices, internal control exercised by the supplier plays an important role. In the European Union, the control of industrial products is largely based on the *Supplier's Declaration of Conformity.* The supplier (manufacturer, importer, etc.) assumes responsibility for declaring that the product complies with stated public requirements. No authority or third party verifies this judgement. This arrangement requires proper market surveillance and a product liability organisation, as will be explained below.

   Only for the most safety-sensitive products in the TBT area are there requirements for alternative product or quality management system certification. For SPS related products, there are requirements for product or quality management system certification and/or sanitary/phytosanitary certificates. The need for independent testing or third party certification has to be carefully considered and will also be influenced by customer requirements. In the SPS area, the Competent Authority (CA) is the only third party that is accepted by most importing countries.

5. *Simplify the organisation.*

   Traditionally, many regulating and enforcement agencies have a complex organisation. There may be separate legislation and organisation units for each product or product group. Such practices may lead to a waste of resources, dilution of expertise and grey areas of responsibility. In particular when resources are scarce, as in most African countries, the organisation should be simple and professional expertise should be concentrated.

6. *Ensure transparency in order to avoid corruption.*

   Substantial economic interests are linked to conformity assessment of products. Internationally, fraud and corruption related to test reports and certificates is a

well-known problem. Simplified procedures with few middlemen, transparent processes and restrictive use of certificates, are among the means to counter this threat.

"The leapfrog strategy"

When comparing the strategies in the previous sub-section to the actual situation as described in Chapter 7, it becomes apparent that the gap is large. There are only two ways of filling this gap:

- Improve and supplement existing legislation, or
- Use the *Leapfrog Strategy*. Leave the entire old problem behind and develop new, fresh solutions, as illustrated in Fig. 15.

SADC is currently discussing which approach to take. We understand that Mali has recently decided to go for a leapfrog strategy, having studied its own situation as well as international developments in the SPS area.

Each country has to decide, on the merits of the present situation and where it wants to go, which of the strategies to choose. Bearing in mind the extensive developments that have taken place since most countries acquired their present legislation, we believe that the *Leapfrog Strategy* should be applied to many sectors. While this recommendation may appear radical, it is normally a simpler approach than the alternative, due to the complicated nature of existing legislation. When seen in a regional perspective, as in Section 12.1, this becomes even more apparent.

A country will need two sets of legislation, a general legislative framework and a sector approach for those areas where additional regulation is deemed necessary. The two sets of legislation are the subjects of the two next sub-sections.

General legislative framework

In principle, every country needs a general legislative framework comprising the following elements, in the form of separate or integrated acts.

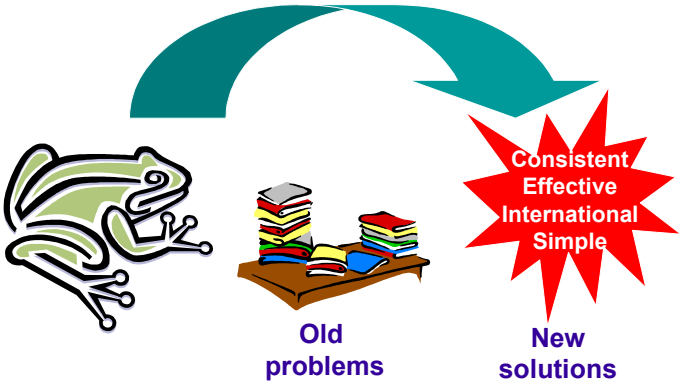


Figure 15: The leapfrog strategy

– *Weights and measures act*
The act states legal units of weights and measures in trade and defines the responsibilities for maintaining the standards and enforcing this system of legal metrology.

– *Act on metrology*
The act states the organisation that is responsible for maintaining the national standards for units such as mass, length, volume, temperature, electricity, etc. National standards need to be traceable to international standards. National standards are used as references for calibration services to industry. Normally, there is a link to the institution responsible for legal metrology, which also needs calibration of its weights and measures standards.

– *Act on standardisation*
The act should define national standards and the organisation that is authorised to issue national standards. The principles for standardisation should reflect the WTO/TBT agreement and its appendix on standardisation, see Section 11.3. If a National Standards Body exists, its role should be defined.

– *Act on product safety*
The act covers all types of products. It states that everyone who places a product on the market has the

responsibility for complying with requirements in respect of, for example, health, safety and the environment. The main purpose is consumer protection. This act is generic and covers all types of products except where specific legislation exists, for example for drugs, foods, electrical equipment[9].

– *Act on product liability*
  This act concentrates on liability issues in cases when a product causes damage. It defines liability and sanctions for non-compliance.

– *Act on conformity assessment*
  This act regulates principles and authority related to conformity assessment. In modern legislation, suppliers' declarations of conformity play an important role, but other mechanisms are relevant for certain products.

In the SPS area, only one food safety/SPS law is needed, a law which should include all SPS related measures: food safety, animal and plant health. Such a law has now been introduced in the EU and in a number of European countries. Alternatively, three acts should be considered, one for each of the three SPS segments: 1) Food safety, 2) Animal health and 3) Pest and plant protection. The present system with scattered food legislation with specific aspects or commodities based on an end product approach sholuld be replaced by a preventive and holistic food chain approach.

One might argue that food safety may be regulated under the general act on product safety. But compared to the complicated, often product-specific legislation that is common in many countries today, we recommend a general food safety law in addition to the general product safety law, but only *one*.

The international model for regulatory harmonisation

In our search to identify a regulatory model for international trade that represents an international best practice, we have decided to highlight the model developed

[9] The term product safety as used in this report covers general product safety as explained here, as well as product safety regulated in specific acts.

by United Nations Economic Commission for Europe (UN/ECE, 2001). As the UN has developed the model, it is available for use by all UN members. The model is currently gaining increasing international recognition.

The model satisfies all the criteria and strategies discussed above. One particular advantage is that the model was developed with regional harmonisation in mind. It will therefore greatly facilitate ongoing harmonisation, for example in UEMOA, COMESA and SADC. It is a simpler model than the alternatives and, in our opinion, represents the best up-to-date regulatory practice.

The model was originally developed for harmonisation of technical regulations. According to our studies, it is equally applicable to food safety and other SPS areas.

The model is illustrated in Figure 16. The figure assumes that it will be used in a regional context, in which the model offers particular advantages, but the model may also be utilised by a single country. At the core of the model is the concept of *Common Regulatory Objectives (CRO)*. The countries taking part define CROs jointly. A range of products or product areas (sectors) is specified to define the scope of the regulations. For each sector, the CROs will address legitimate concerns of governments, for instance those related to public health, safety and protection of the environment. CROs shall not create unnecessary obstacles to international trade.

The CRO shall contain a provision that *products complying with the referenced international, or other agreed standards, are presumed to comply with the requirements.*

This is the *Reference to Standards Principle*. With a statement such as that quoted, the standards remain voluntary, which is in line with the WTO/TBT agreement. Suppliers who find the referenced standards unsuitable for their products may demonstrate compliance with the CRO directly. The standards referred to should not be dated, in order to allow new versions to be applied as they become available. Note that although international standards are favoured, any other agreed standards may also be used. Many sectors of industry have a tradition of using national standards, or even company standards, and the model allows for this.

The practice of reference to standards is not as common in the SPS area as in the TBT area. However, there is no problem in referring to Codex, OIE and IPPC standards in the same way – provided the standard is relevant in its original form. In cases where modifications are required, for example due to special geographical considerations, these may be agreed in regional standards to which reference is made.

The CROs are transposed into each country's legislation or regulations, as indicated in Fig. 16. The mechanism is to be defined by each country, according to their national legal practice. The model is very flexible in this respect. However, the principles of *reference to standards* and *voluntary standardisation* ought to be maintained.

Many countries, including those in Africa, adopt standards in their technical regulations, either by specific reference or by incorporating the text of the standard (with or without modifications) into the regulations. In this way standards that were originally voluntary become mandatory. This practice breaks the principle of harmonisation, particularly as time passes and new or revised standards become available. Such practices should therefore be discouraged and replaced by the *Reference to Standards* principle explained above.

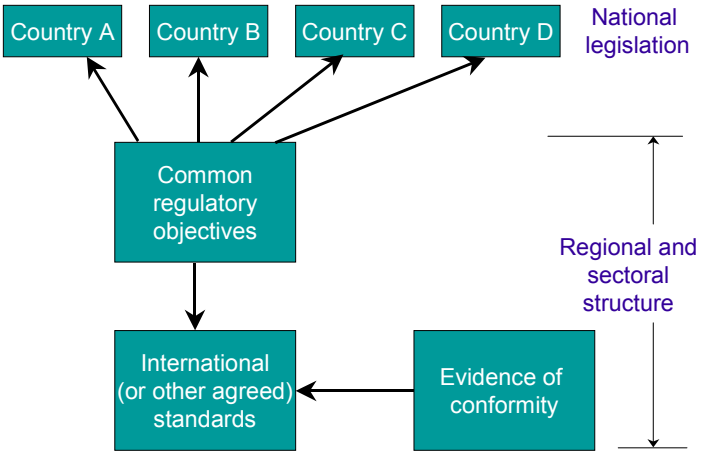


Figure 16: The international model for regulatory harmonisation

The preferred method for demonstration of compliance is the *Supplier's Declaration of Conformity*. In cases where this method is not considered to give sufficient protection, other methods are available, as discussed in the sub-section *General strategies* above:

- Inspection or laboratory testing
- Third party certification of
- Product
- Management system (ISO 9000, HACCP, ISO 14000, etc.)

All certificates should be issued by a *Recognised Conformity Assessment Body (RCAB)* or government auditing agency, such as the Competent Authority (CA) in the SPS area.

It should be noted that the model also contains provisions related to market surveillance and protection.

While the international model for regulatory harmonisation is well proven and builds on recognised principles, it introduces a number of regulatory principles that may appear unfamiliar:

- Separate mandatory regulations and voluntary standards, by introduction of the *Reference to Standards Principle*
- Reference to international or other agreed standards
- A regional, rather than national, regulatory system
- A risk-based approach, reflecting the proportionality principle and the risk analysis approach (SPS)
- Demonstration of compliance that includes internal control in the form of the *Supplier's Declaration of Conformity*
- Acceptance of equivalence (to the standards).

These novel features should not stop African countries from applying the model in their own context. The advantages have been pointed out above, and the main disadvantage is that of resistance to change.

Recommendations at the African level

- *Review current legislation for quality and product safety in the light of the principles and strategies discussed here.*

– *Adopt the Reference to Standards principle as one of the foundations.*
– *Consider the International Model for Regulatory Harmonisation for sectors where specific legislation is needed. Consult with trade partners in Africa in order to agree on a joint regional model.*
– *Prepare a work plan for revamping legislation, regulations and standardisation, including setting priorities and allocating resources.*
– *Implement the work plan with support from developed countries.*

Recommendations at the international level

– *Promote the International Model for Regional Harmonisation.*
– *Conduct awareness training on legislative strategies for authorities and the private sector.*
– *Provide TRTA in the form of training courses and twinning arrangements for authorities that are active in revamping their legislation, regulations and standardisation.*

Conformity assessment/enforcement

Conformity assessment is a commonly used term related to quality. ISO 9000 defines conformity as *fulfilment of a requirement.* Conformity assessment may be

– *First party:* by the supplier himself
– *Second party:* by the customer, or
– *Third party:* by an authority or other independent party such as a certification body.

In the SPS area the term *enforcement* is more commonly used. This denotes conformity assessment by a third party, usually the *Competent Authority (CA)*, which is also authorised to administer sanctions.

There is an international trend to depend more on first party control than was earlier the case. This is sometimes linked to requirements of a management system for control of the organisation's activities and results, such as ISO 9000 or HACCP. To some extent system control replaces product control in the form of testing and inspection. Such strategies go under many

names, e.g. internal control, own-check, self-inspection. In this report we use *internal control.*

Under such a regime, authorities typically make use of some or all of the following instruments:

- Supplier's declaration of conformity
- Audits of management systems
- Inspections in the form of spot checks, supplemented by laboratory testing
- Product certification (for the most safety-sensitive products).

We shall return more specifically to these subjects in Section 11.2 (TBT) and 11.3 (SPS). There are somewhat different practices in the two areas.

Three specific forms of conformity assessment and enforcement that are executed by the authorities should be discussed specifically:

Border control inspection

Border control comprises import control and export control. The purpose of border control is to verify that exported and imported goods comply with regulations, standards and other specifications. Public border control is limited to compliance with regulations. Importers' or exporters' border control will also include compliance to contract specifications. Border control includes regular border control stations as well as border surveillance to prevent illegal imports or exports.

Border control comprises two elements:

- *Document control*, for customs, quotas and statistical purposes, which are outside the scope of this project
- *Border control inspection*, usually spot checks (but sometimes 100% inspection) of quality and product safety. Checking of sanitary/ phytosantiry and food safety certificates is an important part of the border control in the SPS area.

Public import control inspection is carried out partly by customs officials, partly by enforcement authorities, for example for food safety. The use of customs officials, through supplementary training, should be encouraged. The methods used are visual inspection, sampling and laboratory testing. Visual inspection may be enhanced, for example by non-destructive testing methods.

African countries need to develop their border control inspections. The *Integrated Framework* emphasises development of good border control.

Substantial savings may be achieved through co-operation between neighbouring countries. The most important needs related to public border control inspection are:

- Sampling and simple inspection equipment. The investments for this are moderate.
- Training in inspection and sampling techniques
- Access to laboratories, including a logistics system for samples and test results.

The exporters' export inspection should be developed as part of targeted export schemes in the private sector. Specialised equipment and training may be required for this form of export inspection.

Recommendations at the African level:

- *Develop a system for import border inspection according to the needs of the country. Balance border inspection and market surveillance (see below). Balance own inspection system with neighbouring countries' inspection systems and promote co-operation.*
- *Provide training in inspection and sampling techniques for customs officials and, if required, specialist enforcement personnel.*

Recommendations at the international level:

- *Provide expert support for the development of systems for border control, preferably on a regional basis*
- *Provide training and equipment for inspection and sampling.*

– *Continue the development of border control through the Integrated Framework.*

Market surveillance

Market surveillance and border control are the common methods for revealing non-conformity related to imports and placing products on the market. These methods represent a last resort to stop products if the preventive methods discussed in this chapter do not work.

Market surveillance comprises two elements:

– Surveillance of marketing, notably in public media
– Inspection, sampling and testing (spot checks) in the market place (markets and shops).

There is a strong need to develop market surveillance in African markets, as the systems today are very weak. Substandard, and even hazardous products are common. The responsibility for market surveillance rests with the regulatory authority. Execution may be with the regulatory authority or with an appointed body. The most important needs related to market surveillance are similar to those for border control:

– Sampling and simple inspection equipment. The investments for this are moderate.
– Training in inspection and sampling techniques.
– Access to laboratories, including a logistics system for samples and test results.

Informed consumers are essential for effective market surveillance, as the purpose is to protect the consumers. Consumers in Africa either are not organised at all or very poorly organised. Awareness building is therefore important. Regulatory authorities should encourage the establishment of consumer organisations and maintain good communications with them.

Recommendations at the African level:

– *Develop a system for market surveillance according to the needs of the country. Balance border inspection and market surveillance (see above).*

– *Provide training in inspection and sampling techniques.*
– *Provide awareness training of consumers and support the establishment of consumer organisations.*

Recommendations at the international level:

– *Provide expert support for the development of systems for market surveillance.*
– *Provide training and equipment for inspection and sampling.*

Legal metrology

All countries need a basic system for legal metrology, as explained in Section 7.3. In Africa, there is a serious need for the upgrading of national systems. Investments are needed in inspection and verification equipment, and in training. SADCMEL, the legal metrology arm of SADC, has estimated the investment needs for a basic *Stage 1* system for all 14 SADC member countries at about • 5 million, i.e. about • 350 000 per country on average.

In *Stage 2*, additional developments should take place in order to obtain harmonised legislation and regulatory control in all important fields of legal metrology and across the continent.

Recommendations at the African level:

– *Prepare specific plans for a Stage 1 system for legal metrology in all countries*
– *Start development, including legislation, organisation, investments in equipment and training*
– *At a later stage, plan further developments*

Recommendation at the international level:

– *Support developments by providing technical assistance, equipment (including used instruments) and training*

11.2 The TBT infrastructure

The legislative strategies outlined in Section 11.1 can be applied to the TBT area as well as the SPS area. In this section we shall review the elements of the TBT infrastructure more specifically. The principal elements are:

- General legislative framework
- Sector legislation
- Voluntary standardisation
- Conformity assessment
- Information services through the WTO/TBT enquiry point

The general legislative framework was briefly explained in Section 11.1. It plays an important role in the TBT infrastructure. In addition to the legislation, a supporting institutional infrastructure is required, as further discussed in Section 11.4.

Sector legislation is needed for sectors that require protection over and above the level offered by the general product safety and product liability act. Each country has to decide which sectors to include, in order to ensure safe products on domestic markets. Typical examples are:

- Electrical equipment
- Machinery
- Building materials and construction
- Motor vehicles
- Medical equipment
- Telecommunications equipment

The approach to sector legislation should reflect the recommendations made in Section 11.1. The international model for regulatory harmonisation and the *Reference to Standards* principle are important foundations.

As stated above, the objective of general and sector legislation is mainly to ensure safe products on domestic markets. Exporters have to inform themselves about legislation and regulations in the target markets. These are the requirements that will apply to export products. It is beyond the scope of this report to go into the types

of requirements that apply to the different types of products in each of these markets.

Voluntary standardisation in the technical domain

The WTO TBT committee adopted the following principles for international standardisation in November 2000:

"Transparency. All essential information regarding work planning, work under progress and final results should be made easily accessible to all interested parties and throughout all stages of standards development. Appropriate time and opportunities for written comments should be provided.

Openness. Any interested national member should be provided with meaningful opportunities to participate in standards development.

Impartiality and consensus. The standards development process should be conducted in a non-discriminatory way and should not give privilege to, or favour the interests of, a particular supplier or country. Conflicting arguments must be reconciled to satisfy all national members.

Effectiveness and relevance. The international standards development process should take account of market needs, scientific and technological development. It should also consider regulatory needs and pay due respect to consumer concerns, and concerns relating to the health and safety of workers and the protection of the environment.

Coherence. The standards development process should result in a coherent set of international standards that do not conflict with each other. International standards bodies should co-operate and co-ordinate with each other to avoid conflicting international standards.

Development dimension. International standardisation should take the constraints on developing countries to effectively participate in standards development into consideration. Provisions for capacity building and technical assistance within international standards bodies should also be considered."

Most African countries will benefit substantially by adopting and using international standards, which are

developed according to these principles. The principles should also be adopted for national and regional standardisation. With regard to product quality, several grades or classes of products may be useful in order to adapt standards to domestic industries.

In our opinion, African countries should adopt the same safety and product quality levels as developed countries and incorporate those levels in their standards. Many of the industrial products used in Africa are imported, and if African countries adopt standards that are at a lower level, they will expose themselves to imports of inferior products. Africa may end up as a dumping ground for products that cannot be sold elsewhere.

For African countries with a low degree of industrialisation, the need for independent development of national standards, or participation in international standardisation committees, is normally small. Special export products are an exception. The most important task is to implement international or regional standards as national standards, usually by the simplified "cover sheet method".

For these reasons, the resource need in terms of standardisation staff is modest. A study carried out in the SADC countries indicates that the staff needed for standardisation, even in the largest NSBs, is not more than 10 – 15 persons (SADCSTAN, 2001)[10].

While most NSBs in Africa are governmental or parastatal, attempts should be made to establish a certain distance between government and standardisation *(the arm's length principle)*. This is because many stakeholder groups are expected to benefit from standards, and they should all be fairly represented on the governing board and technical committees, according to the WTO/TBT principles of openness, impartiality and consensus (see above). Government funding of standardisation should still be provided.

The development of voluntary standardisation in an African country should be in stages, and it is not necessary to organise an NSB in the first stage. A general three-stage development model is proposed below:

[10] The total staff may be much larger, but that includes other departments, see Section 7.

Stage 1: National focal point for standardisation

- Adopt a law on standardisation
- Establish a national focal point, responsible for national standards, in an existing organisation
- Establish a small committee structure of (unpaid) interested parties
- Adopt international and regional standards
- Establish an information point.

Stage 2: National Standardisation Body (NSB)

As stage 1, plus:

- Organise the NSB as an independent legal unit, at arm's length distance from the government
- Obtain membership in ISO and relevant regional co-operation bodies
- Start marketing and awareness building
- Extend the information service to include the WTO/TBT enquiry point (see below)
- Start the development of national standards where national needs are not covered by international or regional standards
- Participate in international technical committees, but only those related to issues of significant national interest.

Stage 3: National focal point for quality and product safety

- As for stage 2, but including an extended range of services as indicated under the same heading in Chapter 9
- More active efforts in the adoption of standards, establishing committees and marketing of standards, and standardisation

Conformity assessment

The requirements for conformity assessment to ensure safe products on the domestic market are stated in the product safety act and sector legislation and regulations. For the majority of products, "the unregulated sector",

there is no need for specific requirements. The principles of conformity assessment are described in Section 11.1.

For those sectors that are regulated, requirements for conformity assessment will be specified in the Common Regulatory Objectives (CRO), if the international model for regulatory harmonisation is used. The preferred method in this case is the *Supplier's Declaration of Conformity* as discussed in Section 11.1. Other methods may include product certification, quality system certification or third party inspection of the production process.

Product certification confirms that a product complies with requirements in a standard. Many standards include a description of testing procedures to be used. The certification procedure itself should be based on a recognised model, for example as specified in ISO guides.

Quality system certification confirms that *the system* complies with certain requirements, usually as specified in the international standard ISO 9001. This is not a guarantee of product quality, but a confirmation that the organisation works in a systematic manner and according to internationally recognized practice.

In international trade, recognition of supplier's declarations, test reports and certificates is essential, since non-recognition may involve requirements for additional testing, certification etc. In such cases, consequences in terms of costs and delays may be large and sufficient to keep a competitor out of a market. These are therefore important barriers to trade.

For these reasons, the WTO/TBT agreement contains detailed clauses relating to conformity assessment. Practices shall be non-discriminatory, information shall be open, equivalence shall be accepted etc. Mandatory product certification should be avoided by allowing alternative methods for the demonstration of conformity.

In order to obtain acceptance of test reports, certificates, and eventually the product itself across national boundaries, the competence of the testing institution or the certification body must be trusted. Today, accreditation is the preferred method to document competence of this type. Thus, African laboratories and certification bodies need access to accreditation services. In Section

11.4 we present recommendations for meeting this need.

Use of international standards facilitates conformity assessment. When both the exporting and the importing country make reference to the same standard, only the validity of the conformity assessment method remains to be ascertained.

In addition to the methods already explained above, there is a need for border control and market surveillance. These elements of the conformity assessment infrastructure are similar for the TBT and SPS areas and were dealt with in Section 11.1.

WTO/TBT enquiry points

According to the WTO/TBT agreement, all members are obliged to provide information. The obligation is twofold:

- To notify the WTO of all draft new regulations and conformity assessment procedures. This is the responsibility of the relevant notifying authorities.
- To provide information to any interested party about all existing and proposed regulations, standards and conformity assessment procedures.

The clauses in the TBT agreement represent obligations, but they are also major opportunities. Any exporter in Africa may obtain information from the enquiry point in the target market regarding requirements in the target market.

The TBT enquiry point is often established at the national standards body. The enquiry point depends on information from the authorities responsible for notification, and this is often a bottleneck. In many countries, further efforts are needed to facilitate the operation of the TBT enquiry point. There is frequently a need for training and for IT and communications equipment.[11]

[11] We use the term enquiry point for both functions described above. This is in line with normal practice, but it should be observed that the notification function is the responsibility of authorities and that, for that reason, the functions are sometimes split.

Recommendations at the African level:

- *Establish national standardisation in accordance with the principles laid down in the WTO/TBT agreement and subsequent decisions and recommendations of the TBT committee. Develop the national focal point/standards body in stages according to the needs of stakeholders. Promote adoption of international standards*
- *Develop sector legislation on the basis of national priorities. Be aware of the risk of over-regulation.*
- *Keep requirements for conformity assessment to a minimum. Promote the use of Supplier's Declarations of Conformity.*
- *Refrain from mandatory certification. Make use of voluntary certification as needed, and allow certification bodies to develop in the private sector.*
- *Promote the use of accreditation of private and public laboratories and certification bodies. Facilitate the development of accreditation systems as proposed in Section 11.4.*
- *Establish WTO/TBT enquiry points to cover both tasks (formal notification to the WTO and informal information to interested parties) and ascertain that it is fully informed.*

Recommendations at the international level:

- *Provide training in standardisation and conformity assessment, through basic training courses and twinning arrangements with NSBs and the conformity assessment community in developed countries.*
- *Support the organisation and development of national focal points/standards bodies, including the regional organisation of such bodies.*

11.3 The SPS infrastructure

SPS policy

Most African countries are facing great challenges to develop and implement an SPS policy that will allow them to participate in international trade with agricultural and fishery products. A policy of this type should define the goals and strategies of the SPS system, including the ways in which the government intends to exercise

authority and control over the private sector in the SPS area. This involves a variety of activities, for example developing and implementing regulations and enforcement measures, and educating all stakeholders, including the private sector and consumers.

An effective SPS policy would enhance international trade and also contribute to

- Food security in general, including reduction of crop and livestock losses
- Public health
- Economic growth
- Better governance
- Promotion of other business, e.g. tourism.

The *SPS policy* should be formulated on the basis of the following issues:

Elements:	**Stakeholder groups:**
– Risk analysis and the food chain approach	– Politicians
– Regulations and standardisation	– Private sector
– Enforcement	– Consumers

Risk analysis and the food chain approach

SPS measures consist of legislation and/or enforcement, which are applied to protect the public from unsafe food, plant and animal-borne diseases, and to prevent or limit the entry, establishment or spread of exotic animal and plant diseases. The measures should be scientifically justified and based on risk. All three SPS sectors (food safety, animal and plant health) have adopted the concept of risk analysis as a framework for developing a SPS policy.

Considerable international efforts have been made to strengthen the SPS infrastructure required for a modern integrated system with a holistic food chain approach, which is also the most effective way of reducing risk through the principle of prevention. The close relationship that exists between the three ”partners” – food

safety, plant and animal health can also be illustrated by a few examples. The main tool in pest management is pesticides. Pesticide residues are an important issue in food safety management. Contaminated plants will affect both animals and human health. Another example: diseased animals are dependent upon the use of veterinary drugs, which is, once again, an important food safety concern. Healthy animals may be carriers of microorganisms that are pathogenic to man and may contaminate animal food products during processing, and thus render the food unsafe.

One of the most resource-demanding activities in the food safety area is meat inspection. In most African countries this is the responsibility of the animal health sector, although the aim of the activity is food safety. In some countries, the responsibility for meat safety is even shared, depending upon the market. Meat for export is the responsibility of one ministry/agency, whereas domestic production is under another ministry/agency. Shared responsibility means unclear lines of command and waste of scarce public funds and, in addition, causes conflicts of interests and disorientation of stakeholders.

Safe food is indeed dependent upon healthy plants and animals. Producers cannot make healthy products from contaminated raw materials.

Recommendations at the African level:

- *African countries should set up a well-defined and well-structured SPS policy, taking into consideration the multidimensional aspect of the policy. All stakeholders, including private sector, academic/research institutions and consumer associations/NGOs should be included in developing the policy.*
- *All countries should designate one authority to deal with all SPS matters in a co-ordinated way, linking food safety, animal and plant health to food security, trade and public health in order to avoid scattered responsibilities and conflicting interests.*
- *All African countries should develop a holistic food chain approach based on risk assessment when developing their SPS policy.*

Recommendations at the international level:

- *Support the development of a co-ordinated and risk-based SPS policy with a holistic food-chain approach.*
- *Assist in setting up twinning projects between relevant African organisations and organisations in industrial countries.*
- *Support the need for international co-operation in developing risk analysis tools applicable to developing countries.*

Regulations and standardisation

In Africa, laws, regulations and standards in the SPS area are often outdated and not harmonised with the international recommendations of Codex, OIE and IPPC, which are recognised by the WTO/SPS agreement to be the benchmarks against which national regulations and measures are evaluated. *Harmonisation* with the recommendations given by Codex, OIE and IPPC eliminates the necessity of one country having to provide other countries with justifiable reasons as to why the measures they are applying are necessary to obtain their SPS goal.

The purpose of harmonised standards and regulations is not, however, the standards as such, but the goal of the standards. Mutual recognition of the appropriate level of sanitary protection that makes possible the acceptance of regulatory diversity in order to increase trade is within the aim of the SPS agreement. The adoption of the standardisation approach under the core of CRO (Common Regulatory Objectives) as described in Section 11.1 should also be encouraged in the SPS area, as it is well within the goal of the SPS agreement goal.

Countries retain the right to take sanitary measures for the protection of human, animal and plant health. In doing so, they should determine the appropriate level of protection, which may be higher than that achieved by adhering to international standards. Such measures must be based on *risk assessment*, should be *non-discriminatory* and not more trade-restrictive than necessary, and should not be maintained without scientific evidence.

Through the SPS agreement, WTO members are committed to accept the sanitary/phytosanitary measures used by other members as being *equivalent measures*, even if they are different from their own requirements. The exporting country needs, of course, to demonstrate that its measures will achieve the appropriate level of protection. It is, however, to be noted that, while recognising equivalence, the SPS agreement requires that the measures should not be more restrictive to trade than required by an appropriate level of protection.

In a region where hygienic conditions, animal and/or plant health are at the same level, although not up to international standards, trade with agricultural products may still be established through the development of *regional standards* based on mutual recognition and equivalence.

Many trade problems can be prevented if trading partners share information with each other about sanitary/phytosanitary measures before they are put into force and when changes in the sanitary/phytosanitary situation have taken place. Governments are therefore required to notify other countries before measures are enacted by regulatory authorities, thereby giving other countries the opportunity to comment. This sharing of information is an important concept in the SPS agreement and is covered by the requirement of *transparency*. All new sanitary and phytosanitary regulations have to be published promptly to allow interested members to become acquainted with them.

To implement the transparency provision, each country should establish well-organised procedures in order to ensure the effective operation of *Enquiry Points*, including an efficient flow of necessary information between the many actors in the national system, and between the different levels of the national control systems.

In the food safety area, many countries have diversified food legislation dealing with specific aspects or commodities with an end product approach, instead of a preventive and holistic food chain approach.

Detailed, vertical regulations should be replaced by *risk based, horizontal* mandatory legislation with the *Reference to (voluntary) standards principle* described in Section 11.1.

Recommendations at the African level:

- *SPS regulations/measures should be updated and harmonised with international recommendations/standards developed by Codex, OIE and IPPC.*
- *African countries should participate in relevant activities, i.e. areas or products of national interest, in the Codex, OIE and IPPC.*
- *Encourage regulation diversity based on mutual recognition and acceptance to stimulate cross-border trade.*
- *When national legislation is reviewed, a holistic food chain ("farm to table") approach should be strengthened. In the food safety area, horizontal (generic) legislation based on risk assessment should replace all the detailed, vertical standards/ regulation.*
- *All countries should establish a well-organised and fully equipped SPS enquiry point for the efficient flow of necessary information between the many actors in the national and international system.*

Recommendations at international level

- *Promote the newly developed FAO/WHO Guidelines for food legislation to developing countries, and support similar Guidelines for Animal and Plant Health Legislation.*
- *Support African participation in relevant Codex/OIE/IPPC activities. Support also the new WHO-project for establishing a " Trust Fund for enhanced participation in Codex".*

Enforcement

Regulation alone will have little practical impact without a corresponding enforcement structure to implement the legislation. The general principles for conformity assessment/enforcement are described in Section 11.1

An effective enforcement system comprises *one central SPS authority* with the overall responsibility for all techni-

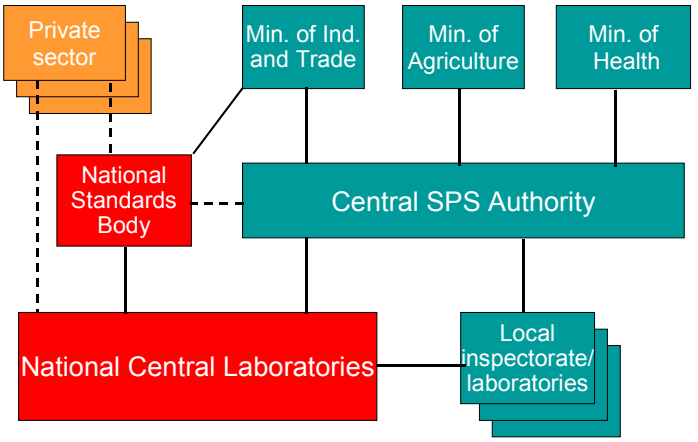


Figure 17: A model SPS infrastructure

cal activities in the policy field and with *one co-ordinated set of local inspectorates* – both with laboratory and scientific support. The inspectorate should be responsible for all enforcement activities related to production and distribution. The model is illustrated in Figure 17. During recent years there has been a considerable international effort to strengthen the infrastructure required for modern and integrated/holistic control along the entire food chain ("farm to table approach").

Inspection is the mandatory regulatory activity of enforcement by national and/or local authorities to ensure that all activities during production, handling, storage, processing and distribution are safe and conform to the phytosanitary, sanitary and other quality requirements – including imported/exported products.

Throughout the whole food chain, farmers/producers, traders, importers and retailers should bear the main responsibility for monitoring that SPS regulations are complied with, i.e. an *internal control system* should be introduced, thus leaving the food control authorities mainly with auditing and training functions.

Training systems for all staff in the SPS area are essential for introducing/assuring expertise in modern inspection and enforcement philosophy as a means to control and monitor risks and encourage the private

sector to adopt HACCP internal control based on GAP and/or GMP/GHP, see Section 10.2.

Worldwide trade in agricultural/fishery products depends upon the use of safety assurance, and sanitary/phytosanitary inspection and certification systems. These systems may, however, also impede international trade if their design and application do not reflect appropriate principles, i.e. Codex principles for Food Import and Export Inspection and Certification System, IPPC's Export Certification System and OIE's Animal Health Code.

Enhanced communication and timely access to relevant information in the central systems between farmers/producers and local inspectors, and between governments, are essential. A system for early warning/rapid alert in the whole SPS area when pests, animal diseases and unsafe food are detected should be established in all countries. Transmission of information and instructions between front liners and central headquarters is essential in emergency cases. The lack of information infrastructure such as computers and telecommunications equipment is the main reason for the weak information flow in a number of countries.

A risk-based SPS enforcement programme is dependent upon scientific support being available. This further discussed in Section 11.4.

SPS control/monitoring programmes also require a basic analytical/laboratory capacity. A broad range of analytical capabilities is required for detecting animal and plant diseases, food contaminants such as pesticides, pathogenic micro-organisms, radio-nucleids, environmental chemicals and biotoxins. Laboratory developments are further considered in Section 11.4.

Specific animal and plant health enforcement

All countries should establish an animal and plant disease emergency programme, including quarantine systems for infected/suspected areas/farms and/or imported animals, plants and products. The programme should also include ways of establishing disease free/infected zones and methods for the control of movements of animal, plants or products between such zones.

Sanitary certificates attesting compliance with requirements issued by the Competent Authority are essential for trade with animal and plant products.

For the development of an animal health policy, it is important to establish a database for the census of all livestock and their disease status. An epidemiological surveillance/disease investigation programme should be introduced for the collection of data.

A regional plant and animal disease control strategy should be encouraged.

Recommendations at the African level

- *Organise national SPS enforcement measures under the umbrella of one Central SPS Authority at national and local levels.*
- *Introduce risk analyses in all enforcement measures.*
- *Introduce a SPS safety management system based on HACCP along the whole food chain.*
- *Introduce internal control systems in the whole SPS area, giving farmers, producers, traders, importers and retailers the main responsibility for ensuring that they are working according to regulations.*
- *Train the SPS Authorities to handle the new internal control systems with auditing as the main tool. This would replace the traditional end-product inspection approach.*
- *Establish border inspection posts with sufficient infrastructure for SPS inspection at all important border crossings, including main ports/airports.*
- *Introduce international harmonised inspection and certification systems for all agricultural and fishery products to be exported.*
- *Introduce a human resource development programme for the training of all staff in the SPS area. A programme of this type should be given the highest priority and should be co-ordinated and systematic.*
- *Establish a system of communications between local and national authorities and from there to international organisations and relevant importing countries etc, thereby enabling an early warning/rapid alert system.*
- *Introduce an animal and plant disease management/emergency programme that would include disease investigation and*

quarantine systems, the establishment of disease free zones, a policy for the movement of livestock and plants, a vaccination policy, emergency preparedness etc.

- *Establish a co-ordinated disease control strategy for livestock and plants at regional level.*
- *Introduce laboratories and scientific methods to support the authority: See Section 11.4.*
- *Establish a data-base for relevant information: See Section 11.4.*

Recommendations at the international level

- *Provide financial support and technical assistance for the reorganisation of the SPS infrastructure in line with the recommendations given above.*
- *Support the training of relevant personnel (management and experts) in the SPS family in risk analysis.*
- *Conduct training for authorities and the private sector in internal control systems based on HACCP.*

The role of politicians

When establishing a SPS policy, it is vital that the politicians are *aware* of the fact that SPS measures are a major factor that influences the ability to develop export opportunities for agricultural and food products. They should also be aware of the fact that implementation of a SPS policy requires *funding*, but will also contribute to society in other important areas (food security, public health and other poverty reducing areas). The politicians should be aware of the need to upgrade and harmonise the SPS infrastructure, including development of manpower and financial investment.

Unclear and shared responsibilities in the same sector, in particular in the food safety area, can be devastating for a country that is trying to enter into international trade. In some cases, ministerial responsibilities have been shared by between up to six ministries and many more agencies and institutions, resulting in duplication or triplication of effort, waste of scarce public funds, conflicts of interest, and the disorientation of many stakeholders. This is not to be recommended.

Confidence is vital in all trade. There should never be

any doubt that risk management related to trade should be performed by independent personnel. In many countries SPS management is performed by officials organised as a part of the political secretariat in a number of ministries, and thus it may be questioned if they are subject to political influence. Moving all operational/technical functions of the SPS policy out of the ministries would separate policy and technical functions.

Recommendations at the African level

- Establish an awareness programme for politicians to ensure funding and priority for a SPS policy.
- Organise national SPS enforcement measures under the umbrella of one Central SPS Authority at central and local levels.
- Separate the SPS administration from politicians and establish an independent and co-ordinated SPS authority outside_the ministries.

Recommendation at the international level

- Provide financial and technical support to implement the recommendations given above.

The role of the private sector

The food chain approach in the SPS policy indicates that all links in the chain are equally responsible for the health and safety of the end products, highlighting the key hazard at each link. *"A chain is never stronger than its weakest link"*.

The movement towards preventive measures such as HACCP (see Section 10.2), rather than end product testing, expands the roles and responsibility of the farmer, processor and the distribution chain. The implementation of a relevant management system such as GAP, GMP, GHP and/or HACCP is therefore essential. For small enterprises and farms even very simple systems are helpful.

The private sector therefore has the main responsibility for ensuring the health and safety of the products. The private sector shall specifically meet the goals by establishing management systems to prevent hazards. The private sector also plays an important role in educat-

ing the consumers. Government and private sector share the common goals of the SPS policy, but they have different roles to play.

Active interaction between government and private sector is vital in order to reach their common goals in the SPS policy.

Recommendations at the African level

- *Introduce awareness programmes regarding the private sector's role and responsibilities related to SPS.*
- *Introduce internal control systems based on HACCP in the whole SPS area/food chain.*
- *Establish education and training programmes for the private sector in HACCP and other relevant management systems.*
- *Share information between government and private sector, as this is vital in order to reach common goals. This means that the private sector has the responsibility for providing all relevant information related to SPS to the Authority concerned.*

Recommendation at the international level

- *Support private sector in African countries in introducing HACCP and other relevant management systems.*

The role of the consumers

Consumer participation in the SPS policy is fundamental. They have the right to know and to participate in the process of determining acceptable risk levels related to SPS and public health. This requires that processes of determination of acceptable risk levels are transparent and that government and private sector alone cannot decide the level of risk the consumers should accept. As other stakeholders in the SPS system, consumers should be aware of risks, costs and benefits.

Consumer associations working on behalf of the consumers in a country or region have a strong position in most industrial countries, and are indeed involved in all SPS related activities, including discussions on risk levels that should be accepted.

In most African countries, consumer associations seem to be non-existent.

Recommendations at the African level:

– *Establish consumers' associations in all countries.*
– *Invite consumer representatives to participate in developing a SPS policy and other SPS- related activities, including determination of acceptable levels of risk. Co-operation between consumer organisations in exporting and importing countries should be stimulated.*

Recommendation at the international level

– *Support the establishment of consumer associations in all countries.*

11.4 Supporting the quality and product safety infrastructure

The responsibility for legislation, regulations, conformity assessment and enforcement systems rests with the regulating authorities. Although the overall responsibility rests with the ministry, all implementation should be delegated to independent authorities. The previous sections of this chapter are therefore mainly directed to the authorities.

One exception is voluntary standardisation which, in our opinion, should be organised independently of authorities and with the participation of several different stakeholder groups.

In addition to this, there is a need for a network of institutions or companies, each playing a role in support of the private sector, or of public authorities, or both. The institutions we consider may be part of the private sector or the public sector. There is an international trend to privatise institutions of this type. In this section we review this supporting infrastructure for quality and product safety.

Scientific support

Scientific assessment of risk is the foundation of the advice given to the authorities for animal and plant health and food safety. Different techniques can be used to conduct risk assessment, including exposure assessment and use of dose-response data. Implementing risk assessment in accordance with the recommendations of the three SPS "sister" organisations (Codex, OIE and

IPPC) is critical for all countries, as this constitutes the base of their defence of their legislation and enforcement procedures in international trade.

An independent scientific committee should perform risk assessment with a number of sub-committees, established for the whole SPS area, at the national or regional level. Risk assessment is dependent upon database censuses of animal and plant diseases and food safety hazards. The committee should have a database available for all potential hazards in the country or region. Representatives of the scientific committees should participate in international research activities through appropriate networks to foster the exchange of all relevant information. Many developing countries face difficulties in gaining access to the scientific expertise required for the implementation of SPS requirements and updates.

Recommendations at the African level

- *Establish a scientific committee, preferably at the regional level, to perform relevant risk assessment in the entire SPS area.*
- *Establish databases for relevant information, including censuses of livestock and plant diseases and food safety hazards.*
- *Train scientific staff in risk assessment related to animal and plant health and food safety.*

Recommendation at the international level

- *Contribute to establishing relevant scientific support for SPS management, including access to services by internationally acknowledged experts.*

Industrial and scientific metrology

The subject of metrology was introduced in Section 7.3.

SADCMET, the industrial metrology arm of SADC, has adopted a strategy of proposing a minimum level for all countries concerned. In *Stage 1*, priority is given to the most basic parameters such as mass, volume and temperature. A centrally located national metrology laboratory would maintain the standards. In this way, a country may obtain a basic system for an investment of USD 50,000–100,000.

Procurement of used equipment should be considered in the first stages of development.

In *Stage 2* more complete metrology institutes are required. Such institutes may involve investments in the order of USD 1 million and upwards for each institute. The metrology laboratories may be extended in scope (number of parameters) and in accuracy, depending on the industrial structure. Any developments in these directions should be directly linked to customer needs, in order to achieve sustainability, both financial and in terms of expertise.

Scientific metrology is a research field, which is expected to receive low priority in African countries except the most industrialised, for example South Africa.

In order to gain international recognition of products, test reports and calibrations performed in African countries, the calibration laboratories need to be accredited according to the international standard ISO/IEC 17025 (ISO/IEC, 1999). This goes for national laboratories as well as for provincial calibration laboratories.

There should be strong links between industrial metrology and legal metrology (see Sections 7.3 and 11.1), even if the disciplines are the responsibility of different organisations, which is often the case. Both depend on traceable calibration to international standards.

Due to the international nature of metrology systems, these disciplines lend themselves to regional co-operation. SADC is a good example in this respect. Such regional co-operation should be encouraged, see also Section 12.1. Wider international co-operation should also be encouraged. The two relevant organisations are BIPM for industrial metrology and calibration, and OIML for legal metrology.

The low volume, high cost and high level of skills requirements in industrial metrology call for novel solutions. A good example is the mobile calibration laboratory, mounted on an army truck, which has been developed by National Metrology Laboratory at CSIR, South Africa, in a UNIDO project, for use in Mozambique. A permanent staff of two metrologists should be

able to cover a large proportion of the calibration needs of this large country.

Traditionally, metrology concentrates on the measurement of physical parameters. However, the needs of industry and testing laboratories in Africa concentrate on the testing of food and agricultural products. For these purposes, chemical and microbiological testing is required. Calibration needs for testing of this type are different from traditional metrology. In order to ensure correct measurements and test results, three types of infrastructure are required:

- *Certified reference materials (CRM),* used in chemical testing. CRM are commercially available, but very expensive.
- *Access to reference laboratories.* A network of reference laboratories for a range of tests is required. A possible organisation is proposed in Section 12.1.
- *Participation in proficiency testing.* This is comparative testing in which a number of laboratories take part. 'Rings' for proficiency testing should be organised both within Africa and at higher levels, where African reference laboratories take part in world-wide proficiency testing.

Recommendations at the African level:

- *Each country should map the needs of industry and public authorities for a metrology infrastructure and develop a staged development plan. Consider procuring used equipment in the first stage of development.*
- *Develop regional co-operation and develop national specialities in order to limit the costs and enhance the expertise of the combined metrology infrastructure.*
- *Concentrate resources and promote co-operation between institutions.*
- *Provide training through twinning arrangements and specialist training abroad.*
- *Ensure accreditation of the national metrology laboratory, calibration laboratories and reference laboratories.*

Recommendations at the international level:

- *Provide technical assistance to develop plans for a metrology infrastructure, including market research.*
- *Support procurement of equipment, financially and technically.*
- *Provide training of metrologists by twinning or by on-the-job training in developed countries.*
- *Support accreditation of metrology laboratories.*

Laboratory testing

African countries with a predominantly agricultural economy will initially need chemical and microbiological laboratories. The cost of equipping, maintaining and operating SPS-related laboratories is high, and careful planning by the central administration is required if resources are limited. In view of the costs, it would be prudent to avoid under-utilisation of laboratory capacity, which is currently the case in some countries. Privately-owned laboratories that have attained accreditation can be used on the same basis as government-supported laboratories.

In addition, basic materials testing laboratories will be needed. In order to obtain international recognition, these laboratories should be accredited. A staged development plan could be as follows:

Stage 1:

- Basic organic and inorganic chemical laboratory. Accredited.
- Basic microbiology laboratory (Investment in equipment, about USD 200,000). Accredited.
- Basic materials testing laboratory (Investment in equipment, about USD 100,000). Accredited.
- Specialised laboratories (animal and plant health etc) for export products as needed. Accredited.

Stage 2:

- A network of provincial chemical and microbiological laboratories. Accredited.
- A fully-fledged national chemical and microbiological laboratory. Accredited. Serving as a regional refer-

ence laboratory for selected tests. (Investment in equipment, about USD 1 million)
- Further development of mechanical, electrical and other technical laboratories. Based on market needs.

Laboratory operation (not including capital costs) should be financially sustainable. Market research related to testing needs should therefore be carried out as part of the planning, prior to deciding on investments in laboratories.

The laboratories have to maintain a standard that permits them to be internationally recognised. Today, this normally means accreditation, including participation in inter-laboratory testing. Often, the laboratories are centres of expertise, capable of giving professional advice on problem-solving, research and product development. Human resource development and the sustainability of expertise are important considerations. Again, the demand for services is a key success factor.

Recommendations at the African level:

- *Co-ordinate laboratory testing in the food safety and other SPS areas into one national laboratory structure only. Concentrate expertise and investments in equipment to the best laboratory.*
- *Prepare for accreditation of national laboratories, starting with 1 – 2 chemical and 1 – 2 microbiological laboratories.*
- *Support development of other laboratories only when there is a market demand for testing services.*

Recommendations at the international level:

- *Support investments in equipment, training and accreditation of national chemical and microbiological laboratories.*
- *Ascertain that there is a demand for laboratory services when considering support for additional laboratory developments.*
- *Support the provision of training in laboratory quality management according to ISO/IEC 17025, supplemented by technical training.*
- *Support accreditation of testing laboratories.*

Product certification

The most common form of certification is of products, which are normally certified with reference to a standard. The certificate confirms compliance with the standard. Product properties are determined on the basis of testing and inspection.

Product certification is one of the alternatives for demonstrating compliance with requirements such as the Common Regulatory Objectives discussed in Section 11.1. However, product certification may also be established independently of regulatory requirements. Many certification bodies operate voluntary product certification as a business in this way.

The justification for product certification lies in the assurance that it offers trade partners and the general public regarding quality and product safety. Assurance of this type may be particularly useful when other mechanisms, for example for product liability and market surveillance, are weak, or when there is little competition on the market.

Product certification should operate on the basis of a recognised scheme such as those described in ISO/IEC Guide 65 (ISO/IEC, 1996).

As a voluntary arrangement, product certification should be financially sustainable. In fact, many certification bodies operate at a profit, including the national standardisation bodies that have taken up certification.

Sanitary certificates are essential tools in trade with animal (including fishery) and plant products, attesting compliance with requirements. These documents should make reference to international standards (Codex, OIE and IPPC) and should be issued by the Competent Authority.

Certification is of little value unless the certificate is recognised in the relevant markets. When the market is national, a certification body and its mark may be recognised by the public because a reputable institution is behind the mark, and because experience is generally good. This is the case for example in Tanzania.

International recognition of the product is often a primary purpose of certification, and such recognition is increasingly based on accreditation. Many certification bodies operate internationally, they are well recognised,

and they are accredited by an internationally accepted accreditation body. In such cases, the certificate may be very valuable for providing market access.

Recommendations at the African level:

- *Abolish mandatory product certification arrangements organised by public authorities. If product certification is considered necessary from a market control point of view, allow certification bodies to operate voluntary certification as one of several methods to satisfy regulatory requirements.*
- *Make use of internationally recognised product certification as a means to obtain market access for export products.*
- *Promote accreditation of product certification bodies.*
- *Introduce international harmonised sanitary/phytosanitary and food safety certificate formats for agricultural and fishery products.*

Recommendation at the international level

- *Provide financial support for product certification, but only when required for establishing an export business and obtaining market access.*

Management system certification

We recommend that African countries increase their efforts to promote quality management systems. This is fully in line with the strategy of the ISO Committee for developing countries, ISO DEVCO. African countries will gain several advantages from this strategy:

- Quality systems according to ISO 9000 have wide international recognition and are always an advantage, and sometimes a requirement, in connection with exports.
- Operating according to ISO 9000 will reduce waste and improve customer satisfaction. Thereby, quality systems contribute to better business results, particularly when the new version, year 2000, of the standard is used.
- Domestically, promotion of ISO 9000 and the associated organisation of work contribute to quality awareness.

HACCP has become the internationally accepted approach for assuring the safety of food – and is strongly recommended by Codex. The HACCP system is a tool used to assess hazards, estimate risks and establish specific control measures in the food safety area as described in Section 10.2. The introduction of HACCP systems in slaughterhouses, agro-processing plants etc. is an essential element in the infrastructure required to become accepted in export markets. An accredited certification body should certify the systems, or alternatively the systems should be approved by the food control authorities, based on system audits.

Certification of management systems can be obtained through international (including South African) certification bodies. At least ten bodies of this type are already active in Africa. These certification bodies are accredited, and their certificates are therefore internationally recognised. This is a straightforward *Stage 1* solution. One problem associated with using international certification bodies is the high costs. Many organisations will therefore need financial support in order to afford certification. One should take care to use certification bodies that observe conditions for accreditation, even when operating far afield.

The development and certification of environmental management systems according to ISO 14000 (ISO, 1996) is another international trend. A total of 49 462 certificates had been issued world-wide by December 31, 2002. In Africa, outside South Africa, this trend is only in its infancy. The development of environmental management systems is mainly an option for companies that are exporters of environment-sensitive products, or that operate environment-sensitive processes.

International certification bodies can handle certification of environmental management systems in the same way as discussed above in respect of quality management systems.

Combination of management systems is an increasingly common option. For instance, many food-processing industries have developed systems that satisfy both ISO 9000 and HACCP requirements, and possibly also

ISO 14000. The system may be integrated, but certification has to be separate.

We do not generally recommend the development of national management certification bodies in African countries at this stage. The market is too small for financial and professional sustainability. Under the circumstances, obtaining accreditation of the certification body, and thus international acceptance of the certificates, would be difficult. The situation will change when the potential market share amounts to 30–50 certificates. A cost-benefit analysis may be helpful in the decision-making process.

Recommendations at the African level:

- *Increase efforts to promote the development and implementation of quality systems based on ISO 9000:2000, HACCP and other relevant standards.*
- *Provide regular training courses in quality management. Make the courses available to the private sector, public authorities and the educational system.*
- *Apply for certification of quality systems with accredited and internationally recognised certification bodies.*
- *Support the development of regional certification bodies when the market for certification is sufficiently large. These certification bodies need to be accredited.*
- *Promote the introduction of environmental management systems and integrated management systems (e.g. ISO 9000, ISO 14000 and HACCP), on the basis of national needs.*

Recommendations at the international level:

- *In Stage 1, provide financial support towards the cost of certification for qualified organisations.*
- *In Stage 2, support the development of certification bodies for quality management systems by providing expert advice on the organisation and development of certification bodies, and training of auditors.*

Accreditation

There is a definite need for accreditation services in Africa. The development of accreditation services should

follow the development of laboratories as discussed above and will provide a natural conclusion of laboratory development projects. There is already access to these services from internationally operating accreditation bodies such as SANAS, the Dutch RvA and the UK Accreditation Service (UKAS). As a short-term *Stage 1* solution, the services of these bodies should be pursued. However, the costs are large and difficult to absorb for African laboratories.

Accreditation is a typical example of a service which depends on high levels of professional expertise and international recognition, but where the volume of services is low at the national level. It will therefore be very difficult to establish financially sustainable *national* accreditation bodies, which is the common method in other parts of the world. The natural alternative is to establish *regional* accreditation bodies.

This strategy has been taken up by SADC and UEMOA. ARSO's role in accreditationis under reconsideration.

SADCA has made most progress. SADCA has prepared a project proposal that presents detailed plans for the first five-year phase of the development of a regional accreditation scheme. In the beginning, the established accreditation bodies, notably SANAS, will provide a Central Focal Point on behalf of the new accreditation system, SADCAS. In each of the interested countries, National Focal Points will be appointed and a pool of assessors trained. SADCAS will issue the certificates and will seek international recognition. In fact, after several years of preparation, SADCAS was accepted as member of IAF and ILAC in Sept. 2002.

At a later stage, SADCA envisages the development of national accreditation bodies. Several countries already have plans for this. Mauritius has passed an Act of Parliament on accreditation.

In our opinion, the general principles for the regional development of accreditation are sound and facilitate a natural *Stage 2* strategy. The SADC initiative could serve as a benchmark for other regions, and the scheme could possibly be extended beyond the SADC area.

However, the demand for services will probably not warrant the development of national accreditation bodies except in a few cases of relatively large industrialised countries, and then only in the long term. A cost-benefit analysis should support the decision-making process for this *Stage 3* development, in order to ensure financial sustainability.

Recommendations at the African level:

- *Apply for accreditation of laboratories, and possibly certification bodies, as soon as their competence have reached satisfactory levels.*
- *Provide training courses in laboratory quality management, based on ISO/IEC 17025, for laboratory management and staff.*
- *Develop regional accreditation schemes. Support the development of SADCAS. In other regions, such as UEMOA, make use of the experience of SADCAS.*
- *Participate actively in IAF and ILAC and strive to become member of their multilateral agreements.*
- *Develop national accreditation bodies only when the needs of the national industry and public services are sufficient to ensure financial sustainability.*

Recommendations at the international level:

- *In Stage 1, provide financial support towards the cost of accreditation for qualified laboratories.*
- *In Stage 2, support the development of regional accreditation bodies by providing expert advice on organisation and development, training of assessors and development of communications systems.*

11.5 Training – a fundamental development strategy

Massive training is a basic strategy for creating awareness and developing the necessary professional expertise in respect of quality and product safety. Evidence that this is the case can be found in several East and Southeast Asian countries, at both the national and company level. In order to achieve the desired effect, the lessons learned

from these countries should be employed. Related to individual training, some of the lessons are:

- Awareness training may be general, but should be followed by more specific training.
- The bulk of the training should be targeted at specific needs and employed soon after completion *(just-in-time-training)*. Combine training courses and *on-the-job training*.
- Develop pilot companies to demonstrate the benefits of new methods and to provide an arena for on-the-job training.
- Employ *train-the-trainer* methodology in order to reach a sufficiently large number of people among the interested parties.
- Utilise remote training techniques by correspondence, e-mail and Internet, utilising the extensive African experience already available.
- Develop standardised training manuals and other training material that can be used in train-the-trainer applications as well as in remote training. International co-operation in Africa and among international organisations can make this form of training efficient.
- Implement almost all training (more than 90%) in Africa. Only advanced specialist training should be carried out in industrial countries.

For development of institutions beyond the awareness stage, *twinning* arrangements should be considered. Twinning is institution-to-institution co-operation. Experts from a developed institution stay for a prolonged period (at least 6 months) with a developing institution. The institutions jointly set goals for development. Progress is followed up closely through reports and feedback sessions. It can be mentioned that experience of twinning projects in Central and Eastern Europe has been good.

The prevalence of AIDS in certain regions of Africa requires special consideration when designing training programmes. In order to achieve sustainability in training and in other forms of technical assistance, it may be

necessary to enrol a considerably larger number of people than what would normally be deemed necessary.

Recommendations at the African level:

- *Use training as a basic strategy for individual development. Make use of experience from other countries.*
- *Use twinning arrangements for the development of institutions.*
- *Utilise remote training techniques, for example correspondence, e-mail and the Internet.*

Recommendations at the international level:

- *Support the training of Africans, mainly in Africa.*
- *Support the development of standardised training material for train-the-trainer applications.*
- *Assist in setting up twinning arrangements between suitable institutions in Africa and in industrial countries.*

12. Participation in international co-operation

Seen from the perspective of an African country, international co-operation has at least two aspects:

- *Regional co-operation.* This is international co-operation within Africa. The most important co-operation agreements and organisations are described in Sections 5.6 and 7.5
- *Worldwide co-operation.* This is co-operation under trade agreements, for example with the EU and the US, and participation in world-wide organisations

In the following we shall address the two issues separately.

12.1 Regional co-operation

Legislation, regulations and standardisation

The international model for regulatory harmonisation was introduced in Section 11.1 above. The model has been specifically developed for regional harmonisation, i.e. when a number of countries join forces to develop a common set of rules with the purpose of facilitating trade, while at the same time ensuring safe products in domestic markets. We have found no other model that offers the same benefits.

Ways of implementing the model regionally and in national legislation and regulations are described in Section 11.1.

The adoption of international standards as national standards and using the *Reference to Standards* principle is part of the harmonised model. The selection of suitable sets of standards should also be made at the regional level, as explained in Section 11.1. Note that other alternatives, such as sector-specific national standards with international recognition, will also fit the model.

For agricultural products, the international model and reference to Codex, OIE and IPPC standards will contribute to regional harmonisation. However, specific regional conditions may warrant exceptions or amendments to the standards. Such adaptations should preferably be implemented at the regional level in order to harmonise requirements. Any adaptation should be based on scientific evidence.

To the extent that specific African needs cannot be met in this way, regional African standards should be developed. EAC, SADC, COMESA and ARSO are among the organisations that are active in this field, and their efforts should be promoted. Codex. IPPC and OIE with their regional co-ordinating committees will be relevant bodies in the SPS area.

ARSO should ensure that it is representative, preferably by gaining the commitment of African organisations such as AU, NEPAD, COMESA, SADC, UEMOA and ECOWAS. With the growing attention to standards as an instrument to promote international trade, ARSO is in position to take on a new role. ARSO is currently revising its strategies and has embarked on a deep reengineering process.

Conformity assessment/enforcement

Each country needs access to a range of conformity assessment or enforcement services. While some of these are basic and should be supplied on a national basis, there are a number of services that are characterised by:

- Demands for professional expertise
- Need of expensive equipment, such as laboratories, certified reference materials or metrology standards
- Low volume of demand.

Examples of such services are:

- Calibration services for industrial and legal metrology
- Reference laboratories for chemical and microbiological testing for food safety, animal and plant health
- Proficiency testing (where each participating laboratory tests identical samples and compare results and uncertainties)
- Scientifically based risk assessment
- Quality management system certification
- HACCP management system certification
- Environmental management system certification
- Accreditation.

A number of regional initiatives are already taking place. We have mentioned the SADC SQAM developments, the UEMOA/UNIDO project, the USAID Global Competitiveness Hub and other initiatives.

The regional organisation may take different forms. Some examples:

- Regional African initiatives. Example: SADC SQAM. A network for all member countries. Professional support from competent national organisations. Utilisation of South African resources. Financing required from international donors.
- The project or programme approach. Example: The UEMOA project. The project proposal was developed by UEMOA with the support of an international consultant. Financing by the EU. Implementation by UNIDO (about 2/3) and UEMOA.
- Targeted interventions. Example: ISO training programme on ISO 9000 and ISO 14000. Organised by ISO DEVCO and the national standardisation bodies. Financed by bilateral donor organisations. Implemented country by country in the form of thorough training courses combined with training of trainers; for further training and sustainability.
- Regional co-operation in the SPS area, as foreseen in the proposed SPS annex to the SADC Trade Treaty.

Individual countries will be faced with great challenges in developing and implementing a food safety and quality (SPS) policy, which allow them to participate fully in international trade – including regional trade. Member countries should therefore consider to develop a regional policy with the same components as laid down in a national policy, aiming to use a regional approach to reach their common goal of safety and increased trade. A regional approach may remove structural and institutional weaknesses in the member countries by pooling their resources in order to boost their development efforts. As a part of such a policy, the member countries should consider establishing a regional food safety and quality (SPS) unit with the aim to:

- Support member countries in developing their SPS infrastructure including legislation and enforcement structures
- Provide scientific advice, including risk assessment, in the whole food chain to all member countries-through a regional scientific committee for SPS
- Support member countries to establish monitoring programmes, which enable them to collect and analyse all necessary information, including food contamination, plant pests and animal health
- Establish a regional network of laboratories, supporting member countries with special laboratory analyses across national borders
- Carry out auditing of the national infrastructure in all member countries
- Facilitate training programmes in the whole SPS area.

Recommendations at the African level:

- *Implement the international model for regulatory harmonisation.*
- *Adopt international standards as national standards in Africa and make use of the Reference to Standards principle in the SPS as well as the TBT area.*
- *Encourage regional co-operation in all areas where this will benefit total results. These areas include calibration, proficiency testing, reference laboratories, accreditation, risk assessment in the SPS area, certification of quality and environmental and*

HACCP management systems. Encourage establishing a regional food safety/SPS policy with the same componens as laid down in a national policy.

- *ARSO should ensure that it has the support of African governments and national standardisation bodies as well as regional African organisations, implement its reengineering and strategy process and develop its operations in line with the needs of its stakeholders.*
- *Establish networks which promote learning, experience and skills sharing.*
- *Develop different forms of regional co-operation according to the task at hand.*
- *Develop electronic communication.*
- *Encourage the interaction of the private sector and governments.*

Recommendations at the international level:

- *Support regional initiatives for development, with expertise as well as funds. This includes SADC, COMESA and EAC co-operation. Encourage specialisation and sharing of tasks.*
- *Establish trust funds etc. for the funding of certification and other services when national or regional services are not available. Provide access to services rather than uncritical institution building.*
- *Establish additional regional development projects, which promote regional co-operation in the SPS, quality and product safety area in Africa. Follow the UEMOA/UNIDO, SADC/USAID and EU/ACP projects closely.*
- *The EU should continue to provide support to the North African countries through the MED A and other programmes.*

12.2 World-wide co-operation

Participation in UN, WTO and other trade policy bodies

Africa is composed of 53 countries. Almost every African country is a member of the UN. 40 countries are members of the WTO, and seven more are observers. In this situation, Africa is able to exercise substantial influence – if the countries are able to co-operate. Co-operation should be based on common interests. In certain cases, the African countries will see each other as competitors, for example when several countries

want to export the same product. However, there may still be areas of common interest, for example to work for less strict SPS requirements. Co-operation should be sought in such areas, even if the countries are competing in other areas.

Influence requires knowledge and experience in international work. In the case of Africa, many countries are still at an early stage in their learning process. They should seek assistance to develop their competence. Skilled staff should remain in position long enough to learn 'the rules of the game', and they should teach younger people in their organisations.

With the present number of international organisations, it is necessary to set priorities and make choices that are sometimes difficult. Only the largest countries and those with the most resources can cover all relevant organisations. Other countries have to concentrate their resources on the most important areas. In order to make the most of their resources, they may form more or less formal groups, which act on behalf of several countries. The regional groupings described in Section 5.6 are natural starting points, but groups that are more informal may also work well. Information dissemination is an important part of such co-operation.

Some of the most important trade policy bodies with reference to trade issues are the WTO TBT and SPS committees, and UN bodies such as UNCTAD, ITC, WHO and FAO.

The WTO TBT and SPS agreements both include clauses related to Technical assistance (Articles 11 and 9 respectively). Recently, and notably after the Doha conference in November 2001, *Trade Related Technical Assistance (TRTA)* has received a much firmer position than before on the trade negotiation agenda. While the clauses were previously mainly expressions of good will, they are now bargaining points in the negotiations.

Only a few countries have hitherto included targets and measures for economic development and trade in their *Poverty Reduction Strategy Papers (PRSP)* that they agree with the World Bank and the International Mon-

etary Fund. Such a linkage would be favourable. The *Integrated Framework (IF)* initiative in this respect should be encouraged (see below in this section).

The negotiations on *Economic Partnership Agreements* with the EU should be followed closely, in co-operation between countries with similar interests.

Developing countries' role in international standardisation

We have pointed out above that about 90% of all African countries are members of international standardisation organisations such as ISO, Codex and OIE. Nevertheless, active participation in the work of these organisations is very low. This has been a matter of great concern in many quarters. For instance, ISO, in co-operation with WTO and sponsored by several donors[12], organised a major study: *Enhancing the Participation of Developing Countries in International Standardisation.* (ISO, 2002). The project involved five regional workshops in Belgrade, Bangkok, Nairobi, Bogotá and Cairo 2001 – 2002. A final workshop was organised during ISO's general assembly in Stockholm in September 2002. Following this, a task force was established to edit and further develop the recommendations.

The results of the mapping carried out in connection with the workshops were quoted in Section 7.3 above. The recommendations in Stockholm were directed towards several stakeholder groups:

- National standardisation bodies
- Governments
- Private sector
- Donors
- International organisations

Many of the recommendations are in line with our thinking and have been incorporated into this report under the relevant sections. Some of the principal points with respect to Africa are:

[12] Including Sida

- Develop national standardisation. Define responsibilities between government and the national standardisation body.
- Use standards as basis for technical regulations. Clarify the regulatory framework and the role of standards.
- Promote the use of international standards in developing countries.
- The private sector should address the value of standardisation and improve public/private relationships. In many cases international standards may replace technical regulations.

In this report, we have repeatedly pointed out that international standards should be implemented in both the TBT and SPS area. In the TBT area, the most important organisations are ISO, IEC and ITU. Other standards, such as European standards, may also be useful. For certain industrial sectors, national standards are more important than international.

In the SPS area, Codex, OIE and IPPC are the three dominant standardisation bodies. Effective participation in these organisations requires both access to scientific resources and funding. African countries and donors should work together to establish suitable arrangements, for example co-operation and twinning arrangements between scientific institutions in Africa and in industrial countries. International support should be given to the establishment of a joint FAO/WHO Trust Fund for enhanced participation in Codex work by developing countries (WHO, 2002).

African countries should strive to maintain their membership of ISO, Codex, IPPC and OIE, and possibly extend their membership to other organisations – if their area of work is of particular concern to a country.

African countries, as all other countries, have to set priorities for their participation in standards development. An African country should take part only in those committees that are of prime concern for the country. In many cases this would mean that participation is concentrated to the relevant committees of Codex, OIE and IPPC, while

the development of ISO standards, which are mainly for industrial products, would be left to others.

Participation in international standardisation should be planned and organised at the national and preferably regional level. Some of the principal elements of the plan:

- Priority areas for participation. Justification in terms of industry needs, public needs and national priorities.
- Stakeholder commitment, including demonstration in terms of participation in national standardisation committees.
- Organisation of participation, including sharing of tasks between countries in a region.
- Annual budget and financial sources, including contributions in kind from national stakeholders.

The funding of travel costs and expenses is one of the principal obstacles to participation by African countries. When applications for funding are linked to a plan and national interests, it will be easier for international donors to justify support.

Co-ordination of activities of international agencies

International organisations and donor organisations have indicated a growing interest in supporting economic development and trade, including the development of a quality and product safety infrastructure. This trend has grown in strength over the last five years. We have pointed out a number of examples earlier in this report.

Co-ordination of these initiatives has been weak, but in recent years important improvements have taken place. Some of the initiatives are:

- *Mapping of needs.* Both the WTO/TBT and the WTO/SPS committees are constantly mapping the needs for Trade Related Technical Assistance (TRTA) in developing countries. In the TBT committee, results and future actions will be proposed during 2003.
- *Databanks.* WTO and OECD have jointly developed the *Doha Development Agenda Trade-Related Technical*

Assistance and Capacity Building Database (TCBDB). The database is now accessible, as is the accompanying report (WTO/OECD, 2002). ISO is also developing a database for technical assistance. These sources will become very useful sources for information and informed planning.

– *Co-ordinating the international quality infrastructure*. In April 2002, the first meeting of international organisations was held in Paris. Several additional meetings have been organised in 2002–2003 and the group has completed the Terms of Reference. The organisations taking part are BIPM, OIML, ISO, IEC, ILAC, IAF, ITU-T and UNIDO. They have agreed to co-ordinate their activities relating to Metrology, Accreditation and Standardisation and have established the JCDCMAS programme. This development should be followed closely.
– The *JITAP* and *IF* projects are described in Section 7.3.
– *The World Bank* has recently published an in-depth study with a focus on Kenya, Mozambique, Nigeria, South Africa, and Uganda, but with important conclusions for all Sub-Saharan Africa (World Bank, 2003). The study is intended to be a resource for information and to provide guidance for policymakers, the development community and others. The report suggests concrete action plans for ways in which African firms and farms can improve product quality and reach international markets in key commodity sectors. The recommendations directly complement the market access development objectives of NEPAD.
– *UNIDO's role* is described in Section 7.3. An up-to-date account of UNIDO's strategies was presented at the Monterrey conference in Mexico, March 2002 (UNIDO, 2002). UNIDO proposed a three-pronged strategy which is similar to our thinking in this report:

  (1) Enable developing countries to rapidly establish the essentials of a quality and conformity assessment infrastructure;

(2) Assist selected productive sectors with high export potential to upgrade quality and compliance with standards and regulations;

(3) Trouble shooting and advisory services. A trust fund has been established to finance the strategies.

- *Co-operation in SPS*. At the WTO Ministerial conference in Doha in November 2001, FAO, WHO, OIE, WTO and the World Bank pledged to work together to strengthen the capacity of developing countries to establish and implement science-based SPS measures. A follow-up seminar on technical assistance and capacity building related to the SPS agreement was arranged in November 2002 with the active participation of FAO, WHO, OIE, IPPC, Codex, UNCTAD, UNIDO and the World Bank.
- During the last few years, *FAO* and *WHO* have proposed a number of joint projects to support the LDCs in their effort to implement SPS measures, in particular in the food safety area:
  - Proposed the establishment of a joint Trust Fund for enhanced participation in Codex work.
  - Developed a new risk- and holistic-based Food Law as a model for developing countries.
  - Arranged, in January 2002, a joint *Global Forum for Food Safety Regulators* in Marrakech, Morocco with the participation of more than 100 countries. Important food safety issues related to developing countries were discussed. The results of the meeting related to capacity building, regulatory issues, risk analyses/risk management and communication/participation and were very much in line with the recommendations in this report.

We would remind the reader that the acronyms used are explained in Appendix 4 and addresses of websites can be found in Appendix 6.

Recommendations at the African level

- *Take part in important international organisations such as*

WTO/TBT and SPS committees, UNCTAD, ITC, FAO, WHO, ISO, Codex, OIE, IPPC, etc.

- *Develop national standardisation. Define the roles of government and the National Standardisation Body.*
- *Promote the use of international standards, and use standards as basis for technical regulations.*
- *Mobilise the private sector to understand the importance of standards. Improve public sector/private sector relationships.*
- *Concentrate participation in international standardisation to the areas of principal concern for African countries, and where developing and industrial countries may have different interests. In many cases this will mean the SPS area (Codex, OIE and IPPC).*
- *Develop plans for participation in international standardisation in order to ensure priority setting and facilitate funding.*
- *Organise joint participation and use proxies in areas of international standards of common interest, since there will always be a lack of funding. Share representative tasks. Efficient exchange of information is essential.*
- *Obtain access to scientific support in areas of SPS standardisation, in order to present scientific arguments effectively.*
- *Report needs for TRTA to the WTO/TBT and SPS secretariats in response to their questionnaires.*
- *Follow up co-ordination by international organisations related to TRTA. Promote trade issues, quality and product safety in contacts with national Ministries of Finance.*

Recommendations at the international level

- *Provide financial support for participation in international organisations. Make sure that priorities are set in accordance with national needs.*
- *Provide scientific support for participation in international SPS standardisation.*
- *Co-ordinate the work of international organisations to take care of the needs of developing countries.*
- *Provide special arrangements that allow low membership fees for developing countries in order to make their participation possible.*

– *Continue the development of databanks for TRTA projects and requests for assistance.*

– *Continue to provide assistance for the integration of trade issues into the PRSPs. The Integrated Framework should focus more on quality and product safety issues in order to strengthen the supply side.*

13. Proposed donor strategies

General strategies

The first issue that a potential donor should clarify is the objectives of the beneficiaries. In this report, we have pointed to two overall objectives, see Section 4.1:

- Improve economic growth and promote trade
- Contribute to the health and safety of the citizens by ensuring effective TBT and SPS infrastructures

From the perspective of this project, the promotion of trade is the essential objective. Donors have to start by identifying the present situation in a country with respect to a few fundamental factors:

- Do government objectives and policies support economic growth and trade? Priorities?
- Are there private sector initiatives related to exports, and trade generally? In many cases export associations or other suitable joint organisations are needed, see Section 7.1. What are these companies and organisations?
- What is the status of the institutions in the TBT and SPS infrastructure?
- Is there viable ongoing regional co-operation?

Based on these findings, overall and specific objectives can be established by the beneficiary. When export is the objective, the *Just-in-Time Export Strategy* has to be ob-

served. It will be necessary to work with several stakeholder groups at the same time, in order to develop all the elements and obtain success in the target market. The examples in Appendix 1 illustrate possible approaches and problem areas.

For the donor organisation, this approach implies that good knowledge of the conditions in the country, structure of industry and trade, influential persons and organisations etc. is essential. Export promotion may easily develop into a national programme.

In the further work, a business plan has to be prepared. Based on an analysis of the present situation and market opportunities, critical success factors and constraints are identified. A co-ordinated action plan is prepared. Customer focus and a long-term perspective are essential.

In parallel with business development, the TBT and SPS infrastructure has to be developed. In the short term, access to services, such as testing and certification, is the key factor. Later, support for the development of institutions may be desirable. Opportunities for regional co-operation should be explored, see Section 12.1.

Renewal of legislation may also be desirable, but may take too long for a specific export initiative. In the long term, however, the legislation should be revised, based on the leapfrog strategy, see Section 11.1.

A certain basic TBT/SPS infrastructure is required for every country. The elements of this wide-ranging topic are discussed in Chapter 11. Donors are traditionally asked to support the development of institutions such as laboratories, standardisation bodies and accreditation. In the past, there have been examples that institutions of this type have been developed without proper regard to the market for their services, often as part of government, and the institutions have ended up as ”white elephants”. We recommend that caution is exercised in this respect.

There must be a market demand for the services of the institutions of the TBT/SPS infrastructure in order to obtain financial and professional sustainability. Donor support for institution building must be based on a thorough assessment of the industrial structure and

potential for export, and filling the identified TBT/SPS gaps to exploit this potential. Active private sector participation in the TBT/SPS infrastructure will often ensure the commercial operation of such entities.

When the volume of demand is low, alternative solutions should be considered. Regional development or purchasing of services from other countries, including international service providers, may prove to be the best solution for the country. However, services provided by international service providers are often costly, and a recently developed export business may not be in position to absorb the costs. Donors should consider sponsoring part of the cost for a period, in order to solve both the public and the private economy problem.

Donors also have to keep in mind that a certain basic TBT/SPS infrastructure is required for every country. The elements of this wide-ranging topic are discussed in Chapter 11.

Donors have to co-ordinate their activities. With the present popularity of TRTA, many bilateral and international donors are active in this field. Experience has shown that a donor may not always know what the other donors are doing. Donor co-ordination is essential, and information exchange is the obvious tool. Co-operation projects should also be considered.

Accidental overlap of sponsor interventions should be avoided at all costs, notably in countries where corruption is a problem.

The tools

Donors should make use of many different tools, starting with the ones their organisations are familiar with. Some typical examples:

– Upgrade country programmes. For donors such as Sida or Norad, the country programme is an essential instrument. Country programmes define the use of resources for several years. It is therefore essential to incorporate trade issues into the country programmes. So far, this has been done only to a small extent as far as Sida and Norad are concerned.
– Integrated regional programmes, such as the

SADC SQAM, SADC/USAID and the UEMOA/UNIDO programmes mentioned in this report, should be promoted. Integration leads to more efficient use of development resources, and the regional approach fosters co-operation and sustainability.

- Export development projects, such as those illustrated in the examples in Appendix 1, deserve a central position in trade development. It is probably the only way to fully realise the *Just-in-Time Export Strategy.*
- Awareness building and training is a fundamental development strategy, as pointed out in Section 11.5. Training programmes are important for awareness building and in preparing for specific export initiatives. They are simple to organise and therefore fit in at an early stage of trade development.
- Direct funding of investments and expenditures should be used with caution. But as part of integrated plans, this form has a place. Some examples:
  - Acquisition of equipment, for example for laboratories – when the need has been proven
  - Sponsoring participation in international meetings, conferences or specialist training courses (general training should be conducted in Africa)
  - Sponsoring part of service fees, for example for accreditation or certification.

Recommendations at the African level

- *Integrate trade issues in national planning. Make sure that these issues are given priority in negotiations with donors.*
- *Prepare specific plans for export initiatives. Organise the stakeholders.*
- *Document opportunities for export development by mapping market opportunities and the country's own supply side.*
- *Promote regional development co-operation.*

Recommendations at the international level

- *Make sure that trade issues are given a place in the donor organisation's country programme.*
- *Establish that the export objectives of the business community coincide with national objectives and priorities.*
- *Observe the Just-in-Time Export Strategy. Support business development as well as the development of a TBT/SPS infrastructure and the role of authorities.*
- *Support the development of institutions only when the demand for services and financial and professional sustainability are documented.*
- *Promote integrated, regional programmes.*
- *Employ a range of development tools, as discussed in this Chapter.*
- *Establish a set of criteria for evaluating proposals for support to trade development.*

14. Evaluation criteria for support

Criteria for evaluation of requests from a developing country

Donors regularly receive requests for support from the governments of partner countries and other developing countries. The donors should establish a set of criteria for rational and consistent handling of proposals for support to trade development.

The criteria should be established at an early stage, when the organisation has little previous experience in handling such requests. This is when the criteria will be most useful. However, this is also the time when the task of establishing the criteria is most difficult. Nevertheless, an imperfect set of criteria is better than nothing. And the criteria may be improved later. Here is a set of basic criteria to start with:

- The country is qualified to receive support, with respect to the policies of the donor in question.
- The donor has, or is able to obtain, sufficient knowledge of the country in order to properly evaluate and supervise the implementation of the intervention, if approved.
- The proposal is in agreement with the beneficiary government's trade strategies.
- There is, or will be, private sector involvement. The private sector stakeholders are competent to develop an export business.
- The proposed development will be sustainable: financially, in the market, and professionally.

– There is a national counterpart or focal point and the recipient capacity is adequate.
– Previous experience of the stakeholders in question is satisfactory.
– There are no unintended overlaps with other donors or interventions.
– Any investment is realistic in relation to the amount of future demand.

Criteria for evaluation of proposals from other sources
Proposals may also come from other sources, such as private sector businesses in a developing country, African regional organisations, other donors, UN agencies and private companies (e.g. consultancies). Such proposals have to be judged by the same criteria as discussed above. In addition, we suggest that the following criteria shall apply:

– The intervention has priority in the recipient country or region.
– The intervention is regionally balanced and adapted to each country in question.
– The organisation making the proposal, and the proposed executing agent, are competent.
– The project plan can be used as a reference document for follow-up with respect to objectives, costs, activities and schedule: on their own or in combination.
– The proposed organisation and contract form are efficient and provide sufficient control.

Recommendations at the African level:

– *General proposals should be prepared with the above type of criteria in mind.*
– *When directing proposals to a specific donor, ask for information regarding evaluation criteria.*

Recommendations at the international level:

– *Develop a set of evaluation criteria – and use them!*
– *Carry out evaluations of current and future projects during implementation in order to find improvement opportunities. Improve the criteria as you gain experience.*

15. From planning to action and results: the way forward

The objective of this project is to devise a strategic plan for a co-operation programme with countries in Africa to promote economic growth and trade while, at the same time, ensuring safe products on domestic markets.

The project has been implemented in close liaison with a number of countries and organisations in Africa, and representatives of the international donor community. Our contacts have clearly indicated that there is an urgent need for a comprehensive report of this kind, as well as further information, not least in the form of awareness training.

The intention of the authors is that this report shall be used to facilitate the development of trade in Africa. The recommendations are expected to provide a good basis for development of this type. We recommend a four-step approach in using the report:

1. Creating awareness

The report is now printed and will be given a wide circulation as hardcopy. It is also released through the websites of Sida and Norad.

Direct approaches should be made to the principal stakeholder groups:

- Private sector organisations, such as chambers of commerce and export associations in Africa
- African governments and the relevant ministries. African regional organisations
- African institutions in the TBT/SPS infrastructure, including regional organisations

– International donor organisations
– International organisations in the quality and product safety (incl. TBT/SPS) area.

The form of approach has to be further considered. Given the range and complexity of the issues, the authors propose to organise one or several workshops or conferences in Africa. The report can also be used as a basis for training courses, notably for stakeholders who need a broad overview of the issues in question.

2. Developing plans

Part II of this report reviews the elements of plans at company, country and the regional level. However, specific plans for sectors of the economy, countries or regions are beyond the scope of this project. Therefore, there is a need for specific planning.

These plans should be based on specific objectives. All interested parties should agree on the objectives. The objectives should be ambitious, yet realistic. Experience has shown that objectives set in this way have a strong motivating effect and can form a vision for all contributing parties.

For each African country that wants to develop its exports, the export potential and target markets should be identified, see Section 10.1. The results should preferably be concluded in public strategies, including objectives, in order to ensure consistent support.

Develop business plans for product development, production, marketing, distribution and financing. Specify quality requirements and the needs for a TBT/SPS infrastructure.

Develop a national (or regional) master plan for development in stages, taking all relevant stakeholders into account.

International organisations and donors should support development of this type in Africa. There will be a need for training, consultancy support and twinning arrangements.

On the government side in industrial countries, trade, development and agricultural authorities should co-operate in order to develop consistent, supportive policies and plans.

3. Implementation

Implementation is the key to achieving results. Too many good plans end up in the filing cabinet, and no results are achieved.

Planning always needs to have implementation in mind. Ambitions must be realistic with respect to available human resources, finance etc. It is better to implement an imperfect plan than to abandon an over-ambitious plan.

The responsibility for implementation of export business development projects, new legislation and institutions of the TBT/SPS infrastructure rests with the African countries. But industrial countries must be prepared to support development in Africa, as outlined in this report.

The industrial countries have a separate responsibility for opening up their markets to value-added products based on African raw materials, notably agro-industrial products and textiles, see Chapter 5 and Section 6.1. This involves trade issues such as tariffs and quotas, and adapting bureaucratic procedures and other non-tariff barriers to trade.

4. Measuring results

The results of development efforts should be measured regularly. Both positive and negative results should be published and reported to the stakeholders. When development is not forthcoming as planned, investigations into the root cause should be carried out and the results used for corrective action.

Measuring results in this way and comparing the results with plans and objectives have a strong motivating effect, which will work on the company, business sector and national level. Extensive experience is now available in industrial countries that substantiates this strategy.

Recommendations at the African level:

– *Promote the development of export businesses according to the strategies proposed in this report.*
– *Prepare and implement national (or regional) master plans for development in stages of export industries, quality and product safety infrastructure.*

Recommendations at the international level:

- *Support the development of export businesses and the associated TBT/SPS infrastructure in Africa.*
- *Revise trade policies as required to provide market access for value-added products based on African raw materials, including agro-industrial products and textiles.*
- *Support the development of African master plans for export initiatives and subsequently their implementation.*

Appendix 1:
Success stories on exports from Africa

Fish exports from Lake Victoria

In 1991/92 the European Union (EU) introduced harmonised health condition requirements for fishery products, which also applied to imports from third countries. The directives specify minimum health/hygiene conditions for fishery products, including sanitary requirements for handling fish in vessels and processing plants. Control capacity based on legal frameworks to support inspection and control, and testing laboratories to provide scientific support, including a number of control and monitoring programmes, were also an integral part of the new directives, together with requirements for training of staff. *One* Competent Authority (CA) is a necessity in the fish sector. The directives are based on the HACCP quality assurance approach.

In addition to the more general EU requirements, the East African countries were affected by some more specific problems, in particular the detection of salmonella in Nile Perch in Spain, outbreak of cholera in the population in some fish exporting countries, and the detection of pesticide residue in fish from Lake Victoria. In each of these cases, EU imposed import restrictions/bans that affected the countries considerably. For some of the bans, in particular those related to the cholera outbreak, doubts have been expressed as to the scientific justification of the measures imposed by EU. The WHO

has clearly indicated that there is no documented evidence of any case of cholera resulting from food imported from cholera-affected areas. Gradually, the ban was lifted and once again Uganda was able to meet the requirement

The fish export ban had a very negative effect upon the whole fishing community and all the families dependent upon income from this trade (up to 1million persons in Uganda alone were affected). USD 40 million was the estimated loss during the period of the ban. Some 60–70% of those employed were laid off and became jobless.

As a result of a substantial investment in upgrading facilities in the whole fish chain, including laboratories, training of manpower in government service and industry, Uganda and Tanzania and finally also Kenya, have been approved by EU for full access to the EU market. As a direct result of the upgrading forced through by EU, the US market has also been opened up. In addition to employment and earnings on the part of the fishing community, this has led to an increase in foreign currency earnings which in turn has contributed to foreign exchange stability.

EU has given Uganda technical assistance and extensive support for the comprehensive task of improving and upgrading the whole fishing industry. This has been in the form of assistance to Uganda in the SPS area according to the *Just-in-Time Export Strategy*, which has certainly benefited the economy and the development of the recipient country. And quite as important: the common consumers in Uganda – as well as the tourists visiting the country – have benefited by receiving safe fish of better quality for their food.

At present, the situation of fisheries in Lake Victoria is a success story. The risk for overexploitation of the fish resource is a warning light on the horizon.

Kenya Flower Council

Kenya is a leading exporter of cut flowers to Europe. The flowers are air freighted daily to Europe and traded at the Dutch flower auctions. The annual output exceeds 35,000 tons. The principal markets are Germany and

Britain. Export of flowers is a fast growing industry and of great importance to Kenya's exports. Up to half a million people are employed directly by the industry or by ancillary suppliers.

To ensure that accepted international standards of environmental protection and worker welfare are adhered to in Kenya and are fully recognised in the markets of Europe, independent growers and exporters came together in 1997 to form the Kenya Flower Council (KFC). KFC has four stated aims and objectives:

- To foster the responsible and safe production of cut flowers and related products as defined in the constitution of the KFC with due regard to the interests of the community and of the environment
- To promote a safe working environment for all farm staff
- To ensure that the welfare of all workers is in accordance with the laws of Kenya
- To grow flowers in a manner that safeguards the natural environment.

To this end, KFC has developed an extensive Code of Practice (CoP). The CoP was drawn up in close co-operation with Kenya's Ministry of Agriculture, Ministry of Labour and other interested parties. The CoP covers the following subject areas:

- Farm management, responsibilities and documentation
- General worker welfare
- Crop protection strategy
- Agrochemicals (safe use and disposal of pesticides, fertilisers, protection of workers)
- Protection of the natural environment
- Post harvest (packaging, waste disposal, worker conditions etc.)

Detailed appendices give guidance to farm managers in meeting these standards.

Membership of KFC commits the member to comply with the CoP. Compliance is audited internally by KFC every six months. In addition, KFC and a random

selection of members are audited twice yearly by Bureau Veritas, the international certification body.

New members have 12 months in which to attain the primary standards. When Corrective Action Requests from the audit have been corrected, the new member can use the KFC logo. But within 12 months the members have to comply with the stricter *Silver Standards*. Unless they comply, they forfeit their right to membership. There is also a *Gold Standards* logo that is awarded for a higher level of responsibility, particularly in relation to the environment.

KFC also operates an export inspection scheme, which has been recognised by the EU and the customers. However, shortly before the completion of this report, EU notified WTO of stricter quality control of flowers: 100% inspection upon arrival in Europe has been requested. This measure would add costs and delays, and Kenya has raised an objection.

Export of fresh fruit and vegetables from Kenya

The main market for horticulture exports is Europe, where compliance with quality and sanitary and phytosanitary requirements is a prerequisite for market penetration. Some years ago, export production was hampered by substandard and unorthodox methods for storing, packaging, transportation and grading which resulted in export losses.

In co-operation with the Japan International Cooperation Agency, Kenya reorganised important parts of its horticulture infrastructure by setting up facilities at the central and regional level with cold storage and refrigerated transportation in the whole chain from the farm to a central facility at the international airport outside Nairobi. The whole structure is operated by a semi-governmental body (Horticultural Crops Development Authority). The aim is privatisation in due course.

The system is based upon regional facilities in seven zones designated and developed to produce horticulture products for export. At small-scale farms, charcoal-run cold stores together with 1–10 acre irrigation schemes have been established. The facilities include a central unit at Nairobi airport with cooling facilities to handle 100 tonnes. This facility includes washing and cleaning

bays, a drying area (with updated drying technologies available) and a grading/packaging area. Moreover, the central unit has facilities for serving the Kenya Plant Health Inspectorate Service, which issues certificates based upon laboratory support, which is also located on the spot. In addition, the system consists of a fleet of nine refrigerated trucks to serve the whole system. The total investment was approximately USD 20–25 million. The facilities earn their revenue through a modest charge for use. The system is expected to become profitable within a short period of time.

The Horticulture Crop Development Authority will indeed be a sustainable organisation, having stimulated growth in horticulture exports and value addition through improved quality and value-adding processing. Without doubt, Kenya's competitiveness in international trade has been enhanced considerably through this investment. At the same time the sales of high quality fruit and vegetables to tourists and Kenyans shall be considered as positive spin-offs.

Export of prawns from Mozambique

Prawns are the most important export product from Mozambique. As early as 1994, the value of prawn exports exceeded agricultural exports. The most important market is Europe.

Mozambique was heavily affected by the EU fishery ban in 1998 (see the case *Fish Export from Lake Victoria*), resulting in a loss of USD 60 000 per month in foreign currency earnings – an extremely heavy burden for a poor country such as Mozambique. Deep frozen prawns, the main export commodity, were not banned, since the prawns were handled and frozen onboard a few large trawlers. However, the prawns were only permitted to be exported to the EU subject to laboratory testing. But testing facilities were lacking in the country and this was a main constraint.

Due to the ban and restrictions implemented in the fishing industry, the country enhanced a number of activities: A *Fishery Master Plan* was launched as an instrument for management and hygienic performance for fisheries. The Government replaced old standards with modern legislation in line with, or compatible with, the SPS agreement.

HACCP was adapted and introduced in the whole fishing industry including vessels, and all producers had to prove that they were working under sanitary condition in accordance with details of the legislation. Mandatory training programmes for personnel in the industry as well as in the fish inspection service were introduced.

DANIDA, and later ICEIDA, have played active roles in implementing the Fishery Master Plan, and have supported the development of laboratories in the two main fish harbours, Beira and Maputo. These two laboratories, together with training facilities, have lifted all restrictions related to fish exports to Europe, and moved the country to the list of countries with full access to Europe with their fish products, including frozen prawns. The laboratories are now preparing for accreditation.

Beef exports from Botswana

For generations, Botswana has been a country of cattle and cattlemen. Some 80% of the population is involved, in one way or another, in cattle breeding and trade.

Approximately 30–40 years ago, a large number of Sub-Saharan African countries participated in the international meat trade, and their products had access to Europe and US markets. Animal diseases were controlled in a way that was acceptable to the importing countries. Slaughter and meat processing facilities were up to international hygiene requirements and, in general, owned by government-controlled enterprises.

However, since then the situation has changed completely. The privatisation of government enterprises resulted in less priority being given to the control of animal diseases. New owners have not been willing to invest in abattoirs that meet international hygienic standards. As a consequence, most of the countries have been removed from the list of countries approved for exporting beef to the EU and US.

One of the very few exceptions to this is Botswana. The country has been able not only to maintain a good situation, but also to improve and streamline the whole animal health infrastructure and meat hygiene standards, thus permitting the country to export to the EU and other profitable markets. Botswana has realised the importance

of the SPS agreement. The animal health regulations and control are based on OIE guidelines to prevent the introduction, propagation and spread of infectious diseases. The meat hygiene in their abattoirs is in line with or above Codex and EU standards. And Botswana has established an animal health information system based on computers in a way that facilitates immediate information flow between all levels and regions. The National Veterinary Laboratory provides competence and laboratory quality assurance equal to the highest international requirements.

The price of maintaining international requirements may be high, but Government officials are convinced that this is a good investment. The export earnings clearly demonstrate that this policy pays.

Exports of sesame, dried mango fruits, cashew nuts, Karité nuts and butter from biologic cultivation in Burkina Faso

In order to sell the above products in the EU, organic cultivation is a promising field for exports. However, EU customers require product certification by a third party (e.g. ECOCERT, a French certification body).

The results of samples analysed in Burkina Faso laboratories are not recognised. The results of ECOCERT subcontracted laboratories are sometimes contradicted by results from customer-related laboratories. This creates suspicion and losses by declassification. A delay of two months to get results from EU laboratories, the time for transportation of those products found in conformity at the time of shipping, affects the quality of products upon arrival. Furthermore, the certification costs are very high.

Certification and bank fees related to payments consume nearly all the profits made. A national capacity of an analysis laboratory that is recognised by an EU accreditation body would resolve many of these problems, not only for the above case but also for other food products.

Export of mangoes from Mali, a landlocked country

Mali is a major producer of mangoes, approx 200,000 tonnes/year, representing 9% of the mango production in Africa. There are more than 80 varieties of mangoes

and the quantity of those appreciated by the consumers totals approx 50,000 tonnes per year. The volume of exports is low, and there is definitely a potential for an increase in the exports of Malian mangoes, both fresh and processed products. However, competition is tough on the global market, and quality is prerequisite number one for success, in addition to regular supplies. Therefore, Malian producers must build in quality in all steps of the mango production chain from farm to the consumer. There are several constraints including:

- Lack of a national policy for mango production
- Insufficient packaging and labelling enterprises and inadequate storing capacity that complies with European requirements
- High transport costs to European markets (air versus ship)
- Difficult access to credit for investment
- Lack of reliable and professional export agents at the major port of outlet, Abidjan

In Mali there are a few initiatives for processing for domestic and export purposes including jam, juice and dried mangoes. Dried mangoes are highly appreciated in the European and US markets. Organic production of mangoes is a niche necessitating a certification body, which is non-existent in Mali. The drying process requires investments in equipment, knowledge and a close follow-up in order to ensure premium quality. Malian mangoes are exported mainly to France and to a lesser degree to the Netherlands, Belgium and England. Mali's export of fresh mangoes to the EU market was 1000 tonnes per year (1998) compared to Burkina Faso 750 tonnes and Ivory Coast 9000 tonnes.

The products exported must comply with EU and Codex norms. There are three quality categories (superior, good and ordinary) and a set of quality parameters is specified (e.g. regarding shape, colour, defects, homogeneity, weight, packaging and labelling). In addition, testing for pesticide residues and presence of salmonella is required.

Appendix 2:
Membership of trade areas and organisations

Country	WTO Members. Date of membership	WTO Observers	TBT Enquiry point	SPS Enquiry point	African Union	Barcelona	Cotonou	SADC	COMESA	EAC	ECOWAS	UEMOA	MED A	ISO Member	ARSO	IEC	BIPM	Codex	OIE	IPPC	ISO 9000 certificates[2]
Algeria		X			X	X							X	X				X	X	X	39
Angola	01.12.96				X		X	X	X					(X)				X	X		5
Benin	22.02.96		X	X	X		X				X	X		(X)				X	X		2
Botswana	31.05.95		X	X	X		X	X						X				X	X		6
Burkina Faso	03.06.95		X	X	X		X				X	X			X			X	X	X	
Burundi	23.07.95		X		X		X		X					(X)				X	X		
Cameroon	13.12.95		X	X	X		X							(X)	X		X	X	X		7
Cape Verde		X			X		X				X							X		X	
Central African Republic	31.05.95				X		X											X	X		2
Chad	19.10.96				X		X											X	X		2
Comoros					X		X		X										X		
Congo	27.03.97				X		X											X	X		
Congo, Democrat. Republic of	01.01.97				X		X	X	X					(X)	X			X	X		
Ivory Coast	01.01.95		X	X	X		X				X	X		(X)	X			X	X		25
Djibouti	31.05.95		X	X	X		X		X												
Egypt	30.06.95		X	X	X	X			X				X	X	X	X	X	X	X	X	642
Equatorial Guinea		X			X		X											X	X	X	
Eritrea					X		X		X					(X)				X	X	X	
Ethiopia		X			X		X		X					X	X	X		X	X	X	1
Gabon	01.01.95			X	X		X											X	X		5
Gambia	23.10.96			X	X		X				X							X			
Ghana	01.01.95		X	X	X		X				X			X	X			X	X	X	5
Guinea	25.10.95				X		X				X				X			X	X	X	3
Guinea Bissau	31.05.95				X		X				X	X			X			X			
Kenya	01.01.95		X	X	X		X		X	X				X	X			X	X	X	46
Lesotho	31.05.95				X		X	X						(X)				X	X		
Liberia					X		X				X				X			X		X	
Libya					X		X[1]							X	X			X	X	X	7
Madagascar	17.11.95			X	X		X		X					(X)				X	X		
Malawi	31.05.95		X	X	X		X	X	X					(X)	X			X	X	X	2
Mali	31.05.95		X	X	X		X				X	X		(X)				X	X	X	
Mauritania	31.05.95			X	X		X											X	X		
Mauritius	01.01.96		X	X	X		X	X	X					X	X			X	X	X	210

Country	WTO Members: Date of membership	WTO Observers	TBT Enquiry point	SPS Enquiry point	African Union	Barcelona	Cotonou	SADC	COMESA	EAC	ECOWAS	UEMOA	MED A	ISO Member	ARSO	IEC	BIPM	Codex	OIE	IPPC	ISO 9000 certificates[2]
Morocco	01.01.95		X	X		X							X	X				X	X	X	164
Mozambique	26.08.95		X	X	X		X	X						(X)				X	X		7
Namibia	01.01.95		X	X	X		X	X	X					(X)				X	X		17
Niger	13.12.96		X	X	X		X				X	X			X			X	X	X	3
Nigeria	01.01.95		X	X	X		X				X			X	X			X	X	X	85
Rwanda	22.05.96				X		X		X					(X)				X	X		
Sao Tome and Principe		X			X		X												X		
Senegal	01.01.95			X	X		X				X	X			X			X	X	X	15
Seychelles		X			X		X	X	X									X		X	9
Sierra Leone	23.07.95				X		X				X				X			X	X	X	
Somalia					X		X												X		1
South Africa	01.01.95		X	X	X		X	X						X		X	X	X	X	X	2625
Sudan		X			X		X		X					(X)	X			X	X	X	10
Swaziland	01.01.95		X	X	X		X	X	X									X	X		29
Tanzania	01.01.95		X	X	X		X	X		X				X	X			X	X		5
Togo	31.05.95				X		X				X	X			X			X	X	X	
Tunisia	29.03.95			X	X	X	X						X	X	X	(X)		X	X	X	376
Uganda	01.01.95		X	X	X		X		X	X				(X)	X			X	X		72
Zambia	01.01.95		X	X	X		X	X	X						X			X	X	X	21
Zimbabwe	05.03.95		X	X	X		X	X	X					X				X	X		91

Shaded countries are LDCs ( ): Associate or corresponding member

[1] Libya may join Cotonou later

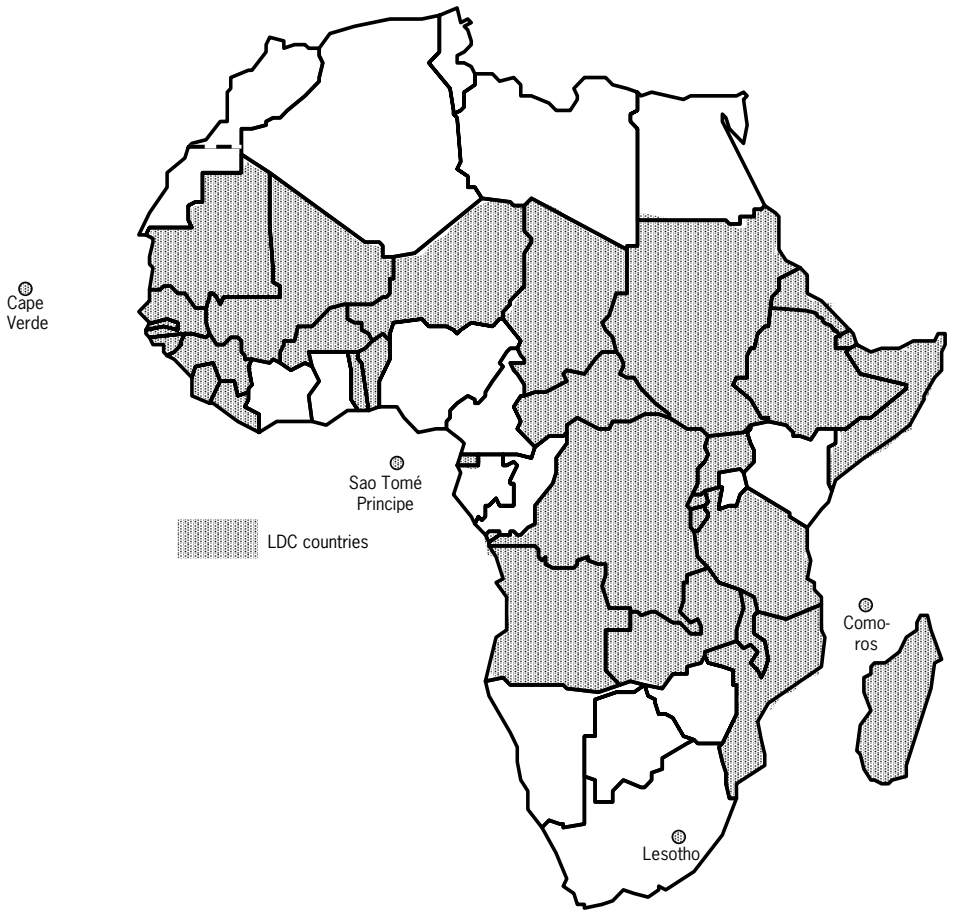
[2] As at December 31, 2002

Maps: See following pages

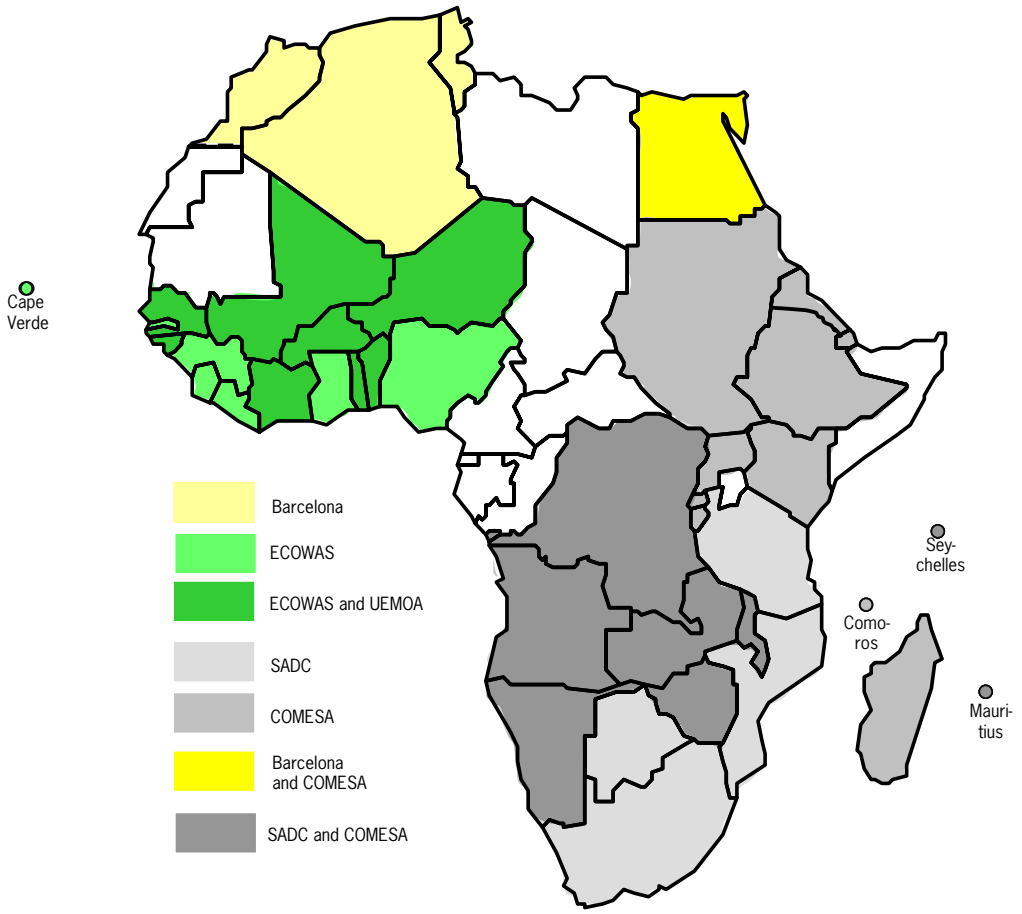
Appendix 3:
Maps of Africa

The countries of Africa

Least developed countries (LDC) in Africa



Important regional groupings for trade in Africa



Appendix 4:
Acronyms

ACP	African, Caribbean, and Pacific countries
AFTA	Arab Free Trade Agreement
AGOA	African Growth Opportunity Act (United States of America)
AMU	Arab Maghreb Union
ARSO	African Regional Organisation for Standardisation
BSI	British Standards Institute
BOBS	Botswana Bureau of Standards
CA	Competent Authority
Codex	Codex Alimentarius Commission
COMECON	Council for Mutual Economic Assistance (CSSR)
COMESA	Common Market for Eastern and Southern Africa
CRM	Certified Reference Materials
CRO	Common Regulatory Objectives
CSF	Critical Success Factor
CSIR	Council of Scientific and Industrial Research (South Africa)
DANIDA	Danish International Development Agency
EAC	East African community
EBA	Everything But Arms (European Union)
EC	Private Sector Exporting Company
ECOWAS	Economic Community of West African States
EFQM	European Foundation for Quality Management
EPC	Export Promotion Board (Kenya)
EPOPA	Export Promotion of Organic Production in Africa
EU	European Union
FAO	Food and Agriculture Organisation

FDI	Foreign Direct Investment
GAP	Good Agricultural Practice
GHP	Good Hygienic Practice
GMP	Good Manufacturing Practice
GDP	Gross Domestic Product
GLP	Good Laboratory Practice
GNP	Gross National Product
GSP	EU's general trade preferences for developing countries
HACCP	Hazard Analysis Critical Control Point
IAF	International Accreditation Forum
ICEIDA	Icelandic International Development Agency
ICPM	Interim Commission on Phytosanitary Measures
IEC	International Electrotechnical Commission
IF	Integrated Framework (IMF, ITC, UNCTAD, UNDP, World Bank and WTO initiative)
ILAC	International Laboratory Accreditation Cooperation
INNOQ	National Institute of Standards and Quality (Mozambique)
IPPC	International Plant Protection Convention
ISO	International Organisation for Standardisation
ITC	International Trade Centre (Geneva)
ITU	International Telecommunications Union
JICA	Japan International Co-operation Agency
JITAP	Joint Integrated Technical Assistance Programme (ITC, UNCTAD and WTO)
KEBS	Kenya Bureau of Standards
KEPHIS	Kenya Plant Health Inspectorate Services
KFC	Kenya Flower Council
LDC	Least Developed Country
MRL	Maximum Residue Level
MTS	Multilateral Trading System
NARO	National Agricultural Research Organisation (Uganda)
NEDLAC	National Economic Development and Labour Council (South Africa)
NEP	National Enquiry Point
NEPAD	The New Partnership of Africa's Development
NGO	Non Government Organisation
NML	National Metrology Laboratory of South Africa

Norad	Norwegian Agency for Development Co-operation
NSB	National Standardisation Body
NTB	Non-Tariff Barrier
OECD	Organisation for Economic Co-operation and Development
OIE	Office International des Epizooties
PARPA	Action Plan for Reduction of Poverty (Mozambique)
PEAP	Poverty Eradication Action Plan (Uganda)
PRSP	Poverty Reduction Strategy Paper (IMF and World Bank documents)
RvA	Raad voor Accreditatie (Dutch Accreditation Council)
SABS	South Africa Bureau of Standards
SADC	Southern African Development Community
SACU	Southern African Customs Union
SADCA	SADC Co-operation in Accreditation
SADCAS	SADC Accreditation System
SQAMEG	SADC SQAM Expert Group
SADCMET	SADC Co-operation in Measurement Traceability
SADCMEL	SADC Co-operation in Legal Metrology
SADCSTAN	SADC Co-operation in Standardisation
SANAS	South African National Accreditation System
Sida	Swedish International Development Co-operation Agency
SME	Small and Medium Enterprises
SPS	Sanitary and Phytosanitary Measures
SQAM	Standardisation, Quality Assurance, Accreditation and Metrology
SQMT	Standardisation, Quality Assurance, Metrology and Testing (COMESA)
SSA	Sub Saharan Africa
SWOT	Strengths, weaknesses, opportunities and threats (in strategic planning)
TBS	Tanzania Bureau of Standards
TBT	Technical Barriers to Trade
TCCIA	Tanzania Chamber of Commerce, Industry and Agriculture
TRTA	Trade Related Technical Assistance
UEMOA	West African Economic and Monetary Union
UKAS	United Kingdom Accreditation Service

UN/ECA	United Nations Economic Commission for Africa
UN/ECE	United Nations Economic Commission for Europe
UNICEF	United Nation Children's Funds
UNCTAD	United Nations Conference on Standards and Trade
UNBS	Uganda National Bureau of Standards
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organisation
USAID	United States Agency for International Development
VRLS	Veterinary Research and Laboratory services (Botswana)
WAITRO	World Association of Industrial and Technological Research Organisation
WHO	World Health Organisation
WTO	World Trade Organisation

Appendix 5:
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Ministry of Foreign Affairs (1999): Strategy for Norwegian support of private sector development in developing countries. Oslo
Ministry of Foreign Affairs (2002): Fight against poverty! Action plan. Oslo

Ministry of Industry and Trade (2002): Strategic Trade Policy 2002. Trade policy for a competitive economy and export-led growth. Dar es Salaam

NEDLAC (2001) Review of the South African Standards, Quality Assurance, Accreditation and Metrology (SQAM) infrastructure. Pretoria

NEPAD (2001): The new partnership for Africa's Development

Pfuhl, Alfred (2000): ARSO/PTB/UNIDO seminar and planning workshop on metrology, standardisation, testing and quality assurance (MSTQ) 8–12 May. Proc. Endingen, Germany

SADC Protocol on Trade (1996). Gaborone, Botswana

*SADC Protocol on Trad*e (2002): Draft SPS and Food safety Annex. SADC, Gaborone, Botswana

SADCA (2001): Programme for removal of technical barriers to trade, enhanced collaboration amongst SADC member states and to foster regional economical growth through accreditation. Project proposal

SADCMEL (2001): Establishment of a harmonised legal metrology regime within member states that is internationally acceptable for trade promotion through the removal of technical barriers and enhanced confidence in trade measurements. Project proposal.

SADCMET (2001): Establishment of internationally credible national metrology institutes in SADC as the basis for other regional conformity assessment activities. Project proposal

SADCSTAN (2001): Establishment of a standards development and standards information infrastructure in SADC member countries that meet national, regional and international demands. Project proposal

SADCSQAM (Testing) (2001): Establishment of testing infrastructure in SADC member countries that meets national, regional and international demands. Project proposal

SAPRIN (2002): The policy roots of economic crisis and poverty. Structural Adjustment Participatory International Network (SAPRIN).

Simensen, Jarle (1996): Afrikas historie (the history of Africa). Cappelen Akademisk Forlag. Oslo

UEMOA (2001): Programme pour le mise en place d'un systéme de normalisation et de promotion de la qualité. Ouagadougou, Burkina Faso

UNCTAD, Secretary-General (2002): The least developed countries report 2002. United Nations, New York and Geneva.

UNCTAD (2002): Diversification of production and exports in commodity dependent countries, including single commodity exporters, for industrialisation and development, taking into account the special needs of LDCs. Background note. Geneva

UN/ECE (2001): International Model for Technical Harmonization Based on Good Regulatory Practice for the Preparation, Adoption and Application of Technical Regulations via the Use of International Standards. Recommendation "L". Geneva

UN/ECE (2002): ECE Standradisation list. Geneva

UNIDO (1997): Implications of international standards for quality and environmental management systems. Survey results. Vienna

UNIDO (2002): Enabling Developing Countries to Participate in International Trade. Strengthening the Supply Capacity. UN Financing for Development conference , Monterrey, Mexico, 18–22 March

US Trade Representative (2002): 2002 Comprehensive Report on US trade and investment policy toward Sub-Saharan Africa and implementation of the African Growth and Opportunity Act. Washington DC

USAID (2002): Southern Africa Global Competitiveness Hub. Proc. Stakeholders Consultation Workshop. Gaborone 28–29 August

USAID/NATHAN Ass. (2002): Mozambique. Mainstreaming trade: A poverty-focused strategy. Maputo

WHO (1999): Report by the Director General to the Executive Board, 105th Session on Food Safety, Agenda item 3.1. Geneva, December

WHO (2002): The project and trust fund for enhanced participation in Codex. Concept paper. Geneva

World Bank, the (2003): Standards and global trade: a voice for Africa. John S. Wilsno, Victor O. Abiola, editors. Washington.

WTO (2002): Sanitary and Phytosanitary Measures: Seminar on technical assistance and capacity building related to the SPS agreement: Presentation by representatives from the FAO, WHO, OIE and IPPC secretariat. Marrakech, November

WTO/OECD (2003): Second joint WTO/OECD report on trade-related technical assistance and capacity building. Paris/Geneva, July

Zarrilli, Simonetta (2002): The SPS agreement and the developing countries. World Bank. Washington DC

Appendix 6:
List of Internet sites

African organisations. General, TBT and SPS websites

http://www.acpsec.org/
ACP countries representation office in Geneva

http://www.africa-union.org
African Union (AU).

http://www.agoa.gov/
African Growth Opportunity Act (AGOA). The US trade initiative

http://www.arso-oran.org/
African Regional Organisation for Standardisation (ARSO)

http://www.coleacp.org
EU Pesticides programme for the ACP countries

http://www.comesa.int/
Common Market for Eastern & Southern Africa (COMESA). Home page

http://www.csir.co.za/plsql/ptl0002/ptl0002_pge001_home
CSIR, the South African technical research institute

http://www.csir.co.za/plsql/ptl0002/
PTL0002_PGE100_LOOSE_CONTENT?LOOSE_PAGE_NO=7025813
National Metrology Laboratory (NML), at CSIR, South Africa

http://www.eac.int/
The East African Community (EAC)

http://www.ecowas.int
The Economic Community of West African States (ECOWAS)

http://www.eos.org.eg/en_home.html
Egyptian Organisation for Standardisation (EOS)

http://www.ianor.org.dz/
Institut Algerien de Normalisation (IANOR)

http://www.inorpi.ind.tn/
National Institute for Standardisation and Industrial Property (INORPI)

http://msb.intnet.mu/MSB/MSBHome.nsf?Open
The Mauritius Standards Bureau (MSB)

http://www.jitap.org/
Joint Integrated Technical Assistance Programme to selected least developed and other African countries (JITAP). Partnership for trade development in Africa, established by WTO, UNCTAD and ITC. Participating countries: Benin, Burkina Faso, Côte d'Ivoire, Ghana, Kenya, Uganda, United Republic of Tanzania

http://www.kebs.org/
Kenya Bureau of Standards (KEBS)

http://www.kenyaflowers.co.ke/index.html
Kenya Flower Council, including information about the Code of Prac-tice

http://www.mbendi.co.za/
"Africa's leading business, travel and tourism website". Links to databases and a wealth of information

http://www.mcinet.gov.ma/snima/
Service de Normalisation Industrielle Marocaine (SNIMA)

http://www.nedlac.org.za/research/fridge/sqam/
South Africa SQAM Review. Final Report, April 2001

http://www.nepad.org/
New partnership for Africa's development (NEPAD)

http://www.qsae.org/
Quality and Standards Authority of Ethiopia (QSAE)

http://www.sabs.co.za/
South African Bureau of Standards (SABS)

http://www.sadc.int/
Southern Africa Development Community (SADC)

http://www.sadc-fanr.org.zw/
SADC Food Security programme

http://www.sadc-sqam.org/Default.htm
SADC SQAM (Standards, Quality Assurance, Accreditation, Metrology).

http://www.sanas.co.za/
South African National Accreditation System (SANAS)

http://www.satradehub.org/
Home page of USAID Southern Africa Global Competitiveness Hub

Home page of the Trade for African Development and Enterprise (TRADE) through Regional Hubs for Global Competitiveness, under USAID

http://www.satradehub.org/Data/Reports/An%20appraisal%20of%20the%20SPS%20provisions%20on%20the%20NAFTA.pdf
Report under "Regional Activity to Promote Integration through Dialogue and Policy Implementation" (RAPID: "An Appraisal of the SPS Provisions of the North American Free Trade Agreement"

http://www.satradehub.org/Data/Reports/SPS%20Annex%20Draft.pdf
Report under RAPID: "SPS Annex to the SADC Trade Protocol"

http://www.satradehub.org/Data/Reports/malawi%202%20final%20with%20disclaimer.pdf
Report under RAPID: "Inventory of harmonisation of sanitary & phytosanitary (SPS) measures in SADC member states. Malawi"

http://www.satradehub.org/Data/Reports/Moz%202%20final%20with%20disclaimer.pdf
Report under RAPID: "Inventory of harmonisation of sanitary & phytosanitary (SPS) measures in SADC member states. Mozambique"

http://www.satradehub.org/Data/Reports/rsa%202%20final.pdf
Report under RAPID: "Inventory of harmonisation of sanitary & phytosanitary (SPS) measures in SADC member states. Rep. of South Africa"

http://www.satradehub.org/Data/Reports/TANZANIA%202%20FINAL%20with%20disclaimer.pdf
Report under RAPID: "Inventory of harmonisation of sanitary & phytosanitary (SPS) measures in SADC member states. Tanzania"

http://www.satradehub.org/Data/Reports/zambia%202%20final%20with%20disclaimer.pdf
Report under RAPID: "Inventory of harmonisation of sanitary & phytosanitary (SPS) measures in SADC member states. Zambia"

http://www.satradehub.org/Data/Reports/Lessons%20learned%20from%20the%20EU%20harmonization%20process,%20giving%20special%20emphasis%20to%20SPS%20relevant%20issues.pdf
Report under RAPID: "Lessons learned from the EU harmonisation process, giving special emphasis to SPS relevant issues"

http://www.sononline-ng.org/
Standards Organisation of Nigeria (SON)

http://www.tbs-tz.org/
Tanzania Bureau of Standards (TBS)

International and European organisations and general information sources

http://www.afd.fr/jahia/Jahia/lang/en/pid/1
l'Agence Francaise de Développement – the French development agency. French and English version with extensive information.

http://www.agoa.info/
The information portal of the African Growth and opportunity Act (AGOA) which liberalises trade between the US and 37 Sub Saharan African countries. The portal links to a large amount of information about AGOA and trade with the US.

http://www.cbi.nl/
Centre for the Promotion of Imports from Developing Countries (CBI). Extensive market information, a link database and an assessment centre.

http://www.cbi.nl/accessguide/
CBI AccessGuide, which contains legislation and market requirements for EU and selected European countries, specific for many product sectors. Covers quality, consumer protection, social and environmental requirements

http://www.cde.int
Centre for the Development of Enterprise (CDE). This organisation is established based on the Cotonou agreement and will work specifically to develop the private sector enterprises.

http://www.commerce-exterieur.gouv.fr
Useful information and statistics about the French-speaking countries in Africa.

http://www.dree.org
Direction des Relations Economiques Extérieures et de développement des entreprises

http://www.eiu.com/
Economist Intelligence Unit. A very good information source for all countries.

http://www.epawatch.net/general/start.php
A website monitoring the negotiations of European Partnership Agreements (EPA) between the EU and the ACP countries

http://europa.eu.int/comm/development/index_en.htm
DG Development, EU. Extensive information of relations to African countries

http://europa.eu.int/comm/food/index_en.html
Home page for Food Safety in EU (from the Farm to the Fork)

http://europa.eu.int/comm/food/fs/inspections/index_en.html
Inspection reports on food safety, within and outside EU

http://europa.eu.int/comm/trade/miti/devel/index_en.htm
DG Trade, EU. Links to many associated sites.

http://www.euforic.org/
detail_page.phtml?&username=guest@euforic.org&password=9999&groups=EUFORIC&workgroup=&page=actors_place
Directory of Non-Governmental Development Organisations worldwide. Database with detailed contact information.

http://www.iccwbo.org/
International Chamber of Commerce website

http://www.integratedframework.org/
The website of the Integrated Framework (IF), a joint IMF, ITC, UNCTAD, UNDP, World Bank and WTO initiative to assist LDCs to take part in the multilateral trading system.

http://www.intracen.org/
International Trade Centre (ITC). This is the technical co-operation agency of UNCTAD and WTO

http://www.un.org/esa/sustdev/index.html
The UN department for Economic and Social Affairs, Division for

Sustainable Development. Including follow up of the world summit on sustainable development in Johannesburg 26 August – 4 September 2002

http://www.oecd.org/home/
OECD home page. Links to Directorate for Development etc.

http://www.saprin.org/
Structural Adjustment Participatory Review International Network (SAPRIN). Including the evaluation report on the World Bank's economic reform programs and their effect upon poverty

http://www.saprin.org/SAPRI_Findings.pdf
Report: "The Policy Roots of Economic Crisis and Poverty". A multi-country participatory assessment of structural adjustment, based on results of the joint world Bank/Civil society/Government Structural Adjustment Participatory Review Initiative (SAPRI) and the Citizens' assessment of Structural Adjustment (CASA). April 2002

http://tcbdb.wto.org/
The Doha Trade-Related Technical Assistance and Capacity Building Database established by the WTO jointly with OECD. Extensive lists of trade-related technical assistance projects and statistics. A very useful source of information

http://tcbdb.wto.org/publish/
Report%202003%20final%20english%20without%20signature.pdf
Second Joint WTO/OECD Report on Trade-Related Technical Assistance and Capacity Building (TRTA/CB)

http://www.tradeport.org/ts/countries/
Tradeport Country Library. A wealth of information about most countries in the world, from a trade point of view. Not always updated. Biased towards American interests

http://www.un.org/esa/ffd/
International Conference on Financing for Development. Monterrey, Mexico, 18-22.03.2002

http://www.unctad.org/
United Nations Conference on Trade and Development (UNCTAD)

http://www.unctad.org/Templates/WebFlyer.asp?intItemID=3074&lang=1
UNCTAD's Least Developed Countries report 2004: "Linking International Trade with Poverty Reduction". A comprehen-sive report focusing on policies that can make trade a more effective mechanism for poverty reduction. The report also points to reasons why trade expansion does not always lead to poverty reduction.

http://www.unctad.org/trade_env/
UNCTADs website for trade, environment and development.

http://www.unido.org/
United Nations Industrial Development Organization

http://www.unido.org/doc/5068
UNIDO Service Module 3: Industrial Competitiveness and Trade. An overview of UNIDO's services related to TBT, SPS and quality.

http://www.usaid.gov/
United States Agency for International Development (USAID)

http://www.usaid.gov/locations/sub-saharan_africa/
USAID activities in Sub Saharan Africa

http://www.wto.org/
Home page of the World Trade Organisation (WTO)

http://www.wto.org/english/docs_e/legal_e/ursum_e.htm#dAgreement%20
Legal texts of the WTO agreements of the Uruguay round.

http://www.wtowatch.org
The trade observatory on WTO, globalisation, trade and sustainable development

http://www.worldbank.org/data/
World Bank. Data and statistics. Extensive and up to date statistics for countries and groupings of countries.

http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:20051548~menuPK:34463~pagePK:34370~piPK:34424~theSitePK:4607,00.html
"Making Global Trade a Tool for Development". New handbook and guide on how developing countries can use WTO to develop.

http://publications.worldbank.org/ecommerce/catalog/product?item_id=1688508
"Standards & Global Trade. A Voice for Africa". An in-depth case-by-case analysis of five African countries: Kenya, Mozambique, Nigeria, South Africa and Uganda

International and European TBT and SPS websites

http://www.iaf.nu/
The International Accreditation Forum (IAF)

http://www.bipm.org/
International Organization for Weights and Measures (BIPM)

http://www.codexalimentarius.net/
Codex Alimentarius. FAO/WHO Food Standards Commission

http://www.fao.org/documents/
FAO home page for the document repository. Lots of documents including SPS issues and excellent search facilities.

http://www.iaf.nu/
International Accreditation Forum (IAF). The organisation of accreditation bodies for certification bodies.

http://www.iec.ch/
International Electrotechnical Commission. (IEC)

http://www.eotc.be/
Home page of The European Organisation for Conformity Assessment (EOTC). Extensive information and links related to calibration, certification, inspection and testing

http://www.fao.org
Food and Agriculture Organisation of the United Nations

http://www.fao.org/tc/
FAO Technical Cooperation Department

http://www.ifoam.org
The International Federation of Organic Agriculture Movements. IFOAM unites and represents the worldwide organic agriculture movement. IFOAM Accreditation Programme is the practical realisation of IFOAM's commitment to har-monise an international guarantee of organic integrity.

http://www.ilac.org/
International Laboratory Accreditation Cooperation (ILAC)

http://www.ippc.int/
International Plant Protection Convention (IPPC)

http://www.iso.org/iso/en/ISOOnline.frontpage
International Organisation for Standardisation. ISO has issued more than 14000 international standards

http://www.iso.org/iso/en/commcentre/pressreleases/archives/2003/Ref864.html
Press release and link to the latest ISO 9000 and ISO 14000 survey, per 31.12.2002.

http://www.oie.int/
World Organisation for Animal Health (OIE)

http://www.oiml.org/
The International Organisation of Legal Metrology (OIML)

http://www.unece.org/trade/tips/stdpol/index.htm
United Nations Economic Commission for Europe. Trade Division. Working Party on Technical Harmonisation and Standardisation

http://www.ticqa.eotc.be
The EOTC database for conformity assessment bodies. Provides information on more than 3600 calibration and testing laboratories and inspection and certification bodies in 29 European countries

http://www.who.int/health_topics/food_safety/en/
WHO website for food safety

http://www.wto.org/english/docs_e/legal_e/15-sps.pdf
The WTO SPS agreement

http://www.wto.org/english/docs_e/legal_e/17-tbt.pdf
The WTO TBT agreement

http://www.wto.org/english/tratop_e/sps_e/sps_e.htm
WTO SPS committee website

http://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm
WTO Technical Barriers to Trade home page

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