Discussion Paper

THE INDUSTRIAL CHALLENGE FACING AFRICA IN THE GLOBAL TRADING SYSTEM

PART 1
BUILDING PRODUCTIVE CAPACITY:
COMPETING IN THE CONTEXT OF GLOBAL PRODUCTION

(Grupo 1)

PART 2
BUILDING TRADE CAPACITY:
THE NEED FOR COMPLIANCE AND CONFORMITY

(Grupo 2)

Prepared by UNIDO
for the 17th Conference of the African Ministers of Industry (CAMI)
19-21 June 2006, Cairo, Egypt
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Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience, and do not necessarily express a judgement about the state reached by a particular country or area in the development process.

This publication has not been formally edited.
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<tr>
<td>AFT</td>
<td>Aid for Trade Initiative</td>
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<tr>
<td>AGOA</td>
<td>African Growth and Opportunities Act</td>
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<td>APCF</td>
<td>African Productive Capacity Facility</td>
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<td>APCI</td>
<td>Africa Productive Capacity Initiative</td>
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<td>AU</td>
<td>African Union</td>
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<td>EBA</td>
<td>Everything But Arms</td>
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<td>ECA</td>
<td>Economic Commission for Africa</td>
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<td>FDI</td>
<td>Foreign direct investment</td>
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<td>GDP</td>
<td>Gross domestic product</td>
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<td>IC</td>
<td>Industrialized countries</td>
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<td>ICT</td>
<td>Information and communication technologies</td>
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<td>IF</td>
<td>Integrated Framework</td>
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<td>ILDC</td>
<td>Industrially less developed countries</td>
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<td>IPA</td>
<td>Investment promotion agency</td>
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<tr>
<td>ITC</td>
<td>International Trade Centre</td>
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<tr>
<td>JCDCMAS</td>
<td>Joint Committee on Coordination of Assistance to Developing Countries</td>
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<tr>
<td>JITAP</td>
<td>Joint Integrated Technical Assistance Programme</td>
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<td>LDCs</td>
<td>Least developed countries</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>NEPAD</td>
<td>New Partnership for Africa's Development</td>
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<td>NICs</td>
<td>Newly industrialized countries</td>
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<tr>
<td>NORAD</td>
<td>Norwegian Agency for Development Cooperation</td>
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<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>PPPs</td>
<td>Public-private partnerships</td>
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<td>R&amp;D</td>
<td>Research and development</td>
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<td>RECs</td>
<td>Regional economic communities</td>
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<td>SIDA</td>
<td>Swedish International Development Cooperation Agency</td>
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<td>SMEs</td>
<td>Small and medium enterprises</td>
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<tr>
<td>SMTQ</td>
<td>Standardization, metrology, testing and quality</td>
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<td>SOEs</td>
<td>State-owned enterprises</td>
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<td>SPS</td>
<td>Sanitary and phyto-sanitary measures</td>
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<td>SSA</td>
<td>sub-Saharan Africa</td>
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<tr>
<td>TBT</td>
<td>Technical barriers to trade</td>
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<td>TCB</td>
<td>Trade capacity building</td>
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<td>TNCs</td>
<td>Transnational corporations</td>
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<td>TRTA/CB</td>
<td>Trade-related technical assistance and capacity building</td>
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<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
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<td>UNIDO</td>
<td>United Nations Industrial Development Organization</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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**Note**

Dollars ($) are United States dollars (US$) throughout this document
INTRODUCTION

Most African countries have yet to make significant progress towards achieving the Millennium Development Goals (MDGs), most particularly the target of halving world poverty by 2015. If the productive sectors are to benefit from new market opportunities stemming from globalization and so contribute to poverty reduction, it is essential that both productive and trade capacity be built up. Microeconomic efficiency gains in manufacturing are potential sources of poverty reduction.

Decision-makers should be made aware of the new features of the industrialization process that have to be included in any shared growth strategy focused on wealth creation in Africa. The technology gap has prevented most African countries from integrating into the global economy and using manufacturing as a dynamic force to reduce poverty. In the ultimate analysis, poverty can only be alleviated through the creation of wealth that, in turn, stems from improved productive capacities and adaptive capabilities. Essential to developing an internationally competitive economy is the capacity to absorb appropriate technologies and produce competitive products that meet market demand and comply with international quality standards.

Africa has missed many market opportunities because of the obstacles it has encountered in building up technological capacity and introducing an integrated knowledge-sharing system. Many African countries are often unable to demonstrate compliance with international standards and compete on an equal footing in international markets. Linking productive capacity and trade is of fundamental importance to global market penetration. If the countries in the region are to derive any benefit from the competitive environment, they will need to promote the diffusion of technology and compliance with international standards in a comprehensive manner.

In the component on sustainable industrial development contained in the New Partnership for Africa’s Development (NEPAD) these new industrial realities are acknowledged. With the support of UNIDO, the regional economic communities in Africa, governments and the private sector are adopting a new approach to enhancing supply-side capacities and strengthening productive capabilities so as to meet the requirements of the global market, inter alia, in terms of standards and conformity assessment. Against this background, effective participation in the many segments of the global production system takes on particular importance.

The document comprises two distinct sections.

The first part focuses on Africa’s weak participation in the global production network; it highlights the challenges facing Africa as the individual countries in the region try to improve productivity and increase value-added at the local, national, regional and global levels. It points to the need to build on cumulative advantages in the region and identifies key determinants of competitiveness in the private sector within the context of developing public private partnerships. A proactive strategic approach to promoting both productive and trade capacities is described, as are new regional programmes within the framework of NEPAD that are focused on sectoral or cross-cutting issues (see Annexes 1 and 2).

The second part describes trade as a potential source of poverty reduction, highlighting Africa’s major impediments to trade and the need for compliance with market requirements. An overview of trade capacity-related interventions is followed by an explanation of the main multilateral initiatives, with particular emphasis on the strategies and initiatives launched by UNIDO. This part also presents the determinants of success in trade capacity building, indicating the need to combat supply-side constraints and strengthening standardization, certification, accreditation, metrology, testing and quality assurance capacities at institutional and enterprise levels. A list of issues in the final section is intended to stimulate informed discussion on the challenge of addressing those issues.
PART 1 - BUILDING PRODUCTIVE CAPACITY: COMPETING IN THE CONTEXT OF GLOBAL PRODUCTION
PART 1

BUILDING PRODUCTIVE CAPACITY: COMPETING IN THE CONTEXT OF GLOBAL PRODUCTION

Abstract

In the first section the paper describes the weak position held by Africa in the global trade of goods and identifies key determinants of the region’s industrial performance. It goes on to outline shifts in the overall structure of international trade and production, together with the challenges they pose for Africa. It analyses the reasons for low productivity rates, points to missed export opportunities and highlights the key determinants of competitiveness.

In the two final sections the paper suggests ways and means of improving competitiveness within the private sector so as to meet the challenge of competing in a global production system that is highly segmented. It goes on to describe the UNIDO approach to promoting productive capacity that supports both the African Union’s strategic plan for industrialisation and the sustainable industrial development component in NEPAD.

1.1. The share of Africa in global trade in manufactured goods

1.1.1 The region’s weaknesses

In 2004 the volume of world merchandise trade expanded by 9\%\footnote{World Trade Organization, \textit{International Trade Statistics} 2005.}. This was primarily due to the dynamic performance of trade in manufactures that grew by 10\% in the same year. Of the total volume of global merchandise exports valued at $8,907 billion, manufactures accounted for some $6,570 billion as against fuels and mining products ($1,281 billion) and agricultural products ($783 billion). In terms of value, Africa’s share amounted to some $212 billion. In structural terms Africa’s merchandise exports in 2004 were skewed towards fuels and mining products (59.1\%), followed by manufactures (25.1\%), agricultural products (12.1\%) and unspecified products (3.7\%).

African decisions-makers in the productive sector need to be aware of the direct correlation between their position in the different segments of the global production system and the positive impact on economic and industrial governance at the local, national, regional and continental levels. They should gradually adjust their approaches to industrial development, if there is to be any chance of reducing Africa’s marginalization in the global production system. Greater knowledge of the individual countries’ specific industrial capacities and capabilities across the whole value chain is becoming a key tool in modernizing the region’s industries.

In 2004 Africa exported goods to the value of $232 billion equivalent to 2.6\% of global trade; it imported goods to the value of $212 billion equivalent to 2.3\% of global trade\footnote{Ibid, p. 80.}. Of its exports, manufactures accounted for $58.1 billion, agricultural products $28 billion and fuels and mining products $137 billion. Taking fuels, mining products and agricultural products together, it can be seen that unprocessed goods accounted for more than 71\% of Africa’s total merchandise exports in 2004. Only 10\% of the goods exported were traded within Africa (intra-trade); the larger shares went to Europe (42.8\%), Asia (16.8\%\footnote{UNIDO, \textit{International Yearbook of Industrial Statistics}, 2006, p. 34 (percentage is in constant 1995 price.). to China alone) and South and Central America (2.9\%).

Africa may well face difficulties in terms of long-term sustainable development, if it fails to promote its capacity and capability to process goods. Productive capacity is an essential complement to trade capacity in Africa. According to UNIDO, the share of Africa in global manufacturing value-added in 2005 stood at 0.7\% as against 5.1\% in Latin America and 18.4\% in South-East Asia\footnote{UNIDO, \textit{International Yearbook of Industrial Statistics}, 2006, p. 34 (percentage is in constant 1995 price.).} (see Graph 1). Global concern is growing over the manner in which effective operational support can be lent to stakeholders in development as they endeavour to attain the targets set in the United Nations Millennium Development Goals.

\footnote{This part of the paper has been prepared by Yves Ekoué Amaïzo and Anders Isaksson (1.3 only), UNIDO, Vienna (Austria).}
(MDGs). Poverty reduction needs to be tackled from both the macro-economic and the micro-economic levels.

1.1.2 Shifts in the structure of trade

The changing structure\(^4\) of global trade is directly related to the global production system, which basically works along the lines of a highly segmented network. This bears many implications for productive capacity in industrially less developed countries. Upstream activities such as policies, business environment and reduction of barriers to competition are of crucial importance. Downstream activities such as support to institutions or the enterprises themselves are fundamental given the ripple effects they have on job creation and a country’s overall capacity to upgrade production. In any wealth generation process, such factors as productive capacity, productivity and competitiveness have to be closely linked. That linkage is one of the prerequisites for sustainable supply capacity and regional integration. It is predicated on the pro-active participation and complementary initiatives of the private sector, the government and support institutions, as well as learning and innovation centres.

\[\text{World trade in Manufactures} = \text{US$ 6,570 billions (73.8%)}\]

UNIDO has identified some of the key determinants of industrial performance: productivity enhancement and the crucial role of institutions and linkages in promoting industrialization. It actively supported the Africa Productive Capacity Initiative, which ultimately emerged as the sustainable industrial component of the New Economic Partnership for Africa’s Development (NEPAD). One of the clear objectives set by NEPAD in the coming years is to increase Africa’s current share in global trade\(^5\). This underscores the need to support all production-related initiatives designed to increase Africa’s share of manufactures in the total merchandise trade. In 2004, no less than 73.8% of global trade was in processed goods (see Graph 2 for manufactures)\(^7\). In that year, manufactured goods accounted for 25.1% of the region’s exports and 71% of its imports. This asymmetry needs to be corrected over time through programmes and projects focused on productivity enhancement in Africa.


\(^5\) 2.6% of global exports and 2.3 % of global imports

1.1.3 The strategic approach of UNIDO

UNIDO has adopted a methodology based on the synergies between the promotion and gradual upgrading of local technological content and upgrading the value-chain process. This is clear acknowledgment that: (a) competition takes place in global production networks and segmented systems; and (b) the private sector derives major benefits from participation in the global market. Partnership and cooperation should thus take place at both the enterprise and institutional levels with the objective of promoting clusters. Special attention should be paid to the priority sectors and crosscutting issues already identified in the NEPAD African Productive Capacity Initiative with the aim of increasing Africa’s participation in both local and global production systems. To that end, UNIDO proposes a three-step approach: 3Ls - Linkages, Leverage and Learning (see section 1.6.1 below).

1.2. Global production networks and productive capacity

1.2.1 Shifts in the structure of production

The overall structure of international trade has shifted with the emergence of more intermediates and the increase in outsourcing activities in specific segments of the value chain. As a consequence, industrial production has changed and the location of production became a less important consideration given the mobility of capital, goods and human resources. A paradigmatic shift towards “externalization” of production and expansion of manufacturing export activities has occurred. In such a setting, increasing the level of value-added in Africa poses a challenge because of the region’s dependence on the export of unprocessed goods. Commodity-based and mineral-based exports are hardly conducive to increasing value-added. Industrial policy and strategy in Africa should thus focus on the specialisation of production processes.

Priority sectors in the value-chain approach in NEPAD/APCI: (i) food processing; (ii) textiles and garments; (iii) leather and leather products; (iv) mineral and metal products (processing of); (v) wood and wood products; (vi) automobile equipment and assembly/spare parts; (vii) pharmaceuticals; and (viii) building materials.

Crosscutting issues in NEPAD/APCI: (i) harmonization of industrial strategies and policies (including statistical data); (ii) improving quality infrastructure, investment promotion and supply chains (trade capacity building); (iii) promoting energy supplies and efficiency, especially in rural areas; (iv) developing information and communication technologies as a mean to reduce transaction costs in productive activities; (v) focusing on technology diffusion, clean production and productivity (vi) promoting conducive regulatory and business environment (support systems and capability building); and (vii) upgrading skills through learning and innovation processes.
The segmentation approach favours major transnational corporations (TNCs) which control both the entire production process and the complete supply chain without any direct involvement in the segmentation of the production process. Most major corporations operate via a system of global production networks, relocating or outsourcing lower value-added activities with lower technology content. Investors and TNCs alike are adapting their activities to this new development pattern; they select countries that present the lowest risks in terms of barriers to competition, availability of skilled human resources, overall flexibility and linkages at the level of both enterprises and support institutions. Africa, however, may not necessarily meet those requirements. Although improving, the level of foreign direct investment in sub-Saharan Africa only reached $11.3 billion in 2004 as compared to $4.1 billion in North Africa (self-financing investment) and the Middle East, $42.4 billion in Latin America and the Caribbean and $63.6 billion in East Asia and the Pacific. For the transnational corporations, the main objective in developing productive capacity through global production networks is to control that part of the value-chain yielding the highest value-added; that is invariably their “core” competency. The downward trend displayed by non-processed goods (see Graph 3 for resource-based products) in global exports overall is a clear indication to the industrially less developed countries (ILDCs) that they should reconsider their industrial and competition policies.

With ever increasing demands in terms of technological content, skills requirements, efficiencies and linkages between firms, barriers become almost insurmountable. Many ILDCs often find themselves forced to compete for outsourcing activities in specific segments of the value chain that are easier to enter. For some countries, it often appears to be one of the best ways of entering the production system. In such a dynamic and changing environment, however, the distribution of wages and their gradual increase may well give rise to new problems. Whereas the revenue generated might well improve the overall standard of living, it is not always immediately available for reinvestment. Profits accruing to foreign enterprises are often repatriated by virtue of the liberal investment codes in Africa. Rents from productive activities are highly dependent on the overall business and investment climate, as well as the general infrastructure, including connectivity, perceived levels of risk for businesses and political stability.

Source: Sanjala Lall, in UNIDO, IDR 2004.

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Countries will need to address the implications that these developments bear for industrial policies as part of their comprehensive competition policies in the context of other related sectoral and crosscutting policies. They cannot be de-linked from the global production network where one needs to understand and master the ability to break down the production process into segments. Each of those segments can be developed independently or in a comprehensive manner. Each of the segments can be developed across national boundaries. Selected parts of each segment can be produced in one of many countries, assembled in one of many other countries and sold on the global market. The role of technical assistance and foreign direct investment should always be viewed in the light of this new reality: manufacturing within a production system that is disintegrated, segmented and fragmented. Mastering productive capacity under these circumstances becomes a crucial issue for countries whose options in terms of integrating and competing in the global production system are limited.

1.2.2 The implications of those shifts

One of the consequences of the shifts in the structure of global production and international trade is to be seen in the international division of labour and the specialization in the production of sub-components as part of the international value chain. Productivity becomes crucially important in a competitive setting. Actors better suited to dealing with competition should also be given more opportunities to lead the process. Enhancing productive capacity, defined in the report on Africa Productive Capacity Initiative (APCI) as the “ability, first to produce goods that meet the quality requirements of present markets and second, to upgrade in order to tap future markets” is one of the best approaches to Africa’s sustainable participation in global production networks and segmented systems. The efficient allocation of resources in specialized production sites or agglomerates around the world has become an important governance issue. The movement of investment and human capital is often more closely related to specific and interlinked segments of the value-chain extending from production right up to the sale of the final product. Value-added needs to be generated at each stage of the segmented production process. In the context of this paper, two segments in the value chain should be highlighted:

- **Downstream segments**: these are usually based on comparative and competitive advantages directly related to incremental value-added in each segment/stage of production. The value-added and technology content is low, as is the level of skills required.
- **Upstream segments**: these are usually based on cumulative advantages. Their focus lies on coordination, knowledge-sharing and brand-ownership in the global production systems.

Producers in the least developed countries (LDCs) need to identify those segments/stages of the production and trading process in which they can participate. The traditional determinants of competitiveness such as land, cheap labour and capital are not necessarily the most important. Equally important are support institutions, which can bring about improvements in productivity and efficiency. Compared to the high productivity achieved in industrialized countries, it is becoming increasingly obvious that the lower wages paid in Industrially less developed countries do not always warrant entering the development process. Simply promoting industrialization on the basis of industries with a low technology content can well prove counter-productive unless the country’s overall competition policy provides for resilient learning and upgrading processes. The asymmetric knowledge-based differences between the ILDC and industrialized countries are reflected in their trade imbalances in terms of both quantity and quality. Improving productive and trade capacity in the ILDCs is predicated on securing similar improvements in their industrial infrastructure and infostructure.

Less than five percent of the Fortune 500 companies are based in low-income countries. The challenge of attracting high calibre multinational corporations to Africa is directly linked to the ability of African governments and regional economic communities to reduce substantially the current barriers to competition in the region. At present, FDI flows primarily to the extractive sectors. Manufacturing in Africa is characterised by a broad spread of production. Regrettably, enterprise agglomerates in Africa are often only to be found in the low value-added segments of the value-chain because they cannot meet the challenge of maintaining sustainability in niche-markets. Measured in terms of the Herfindahl-Hirschman

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index, a standard measure of industry concentration, it would appear that production is more widespread and diversified in Africa than elsewhere; production, moreover, is mainly related to low-tech manufacturing with low value-added. Moreover, when assessing the long-term profitability of private firms in developing countries as compared to industrialized countries, it was found that both the short- and long-term profit rates were lower in industrially less developed countries than industrialized countries. In this regard, Africa is no exception, especially when it comes to average profit rates in manufacturing as compared to mining or services. Despite increasing global competition and the overall trend towards globalization of production, the irony is that concentration of industries seems to encourage or even force the ILDCs to enter global production from the lower end of the value chain.

This situation may well persist for a number of reasons:

- **The existence of barriers to entry at the high end of the value chain**: this is reinforced by the inability to achieve economies of scale;
- **The asymmetric technological divide**: this will call for a collective effort on the part of the ILDCs at both the national and regional levels to reorient their industrial and competitive policies towards a process focused more on learning and knowledge-sharing, with special emphasis on innovative culture and approaches;
- **The difficulty of penetrating markets owing to "brand loyalties"**: over time these have become "brand penalties" at the upper end of the value chain, thus making it essential that the ILDCs create and benefit from their own brands;
- **Competition between plant location in low-wage countries and movement of capital**: a major factor is the ability of enterprises and foreign direct investors to move around the world, typified by dynamic capital mobility. Unfortunately for the ILDCs, the speed with which subsidiaries of multinational companies relocate from one country to another can have a destabilizing effect on local economies, especially when regional economic policy cannot be enforced.
- **Tariff and non-tariff barriers**: although tariffs are being lowered in Africa, exports of industrial goods from Africa, other than those that are resource-based and have a low technology content or value-added, are facing tariff and non-tariff barriers in industrialized countries. This has skewed production towards low value-added sectors, at the lower end of the value chain.
- **Wage increases**: wage increases might ultimately pose a problem, unless enterprises provide for relocation as part of the modernization process, failing which technology would have to be upgraded within the value chain.

### 1.2.3 Industrial policy response

In the light of the above, the industrial policy response has to be changed. Decision-makers will have to decide on the manner in which production moves up the value chain. They will also have to determine the strategies that governments, private sector enterprises and support institutions should adopt to upgrade their industries in a competitive environment. Their comparative advantages will have to be converted into dynamic competitive advantages. For industrial development policy to be sustainable in the long term, decision-makers in Africa may seriously consider moving towards operationalising the concept of "cumulative advantages". Dynamic efficiency and the maximization of sustainable productive growth in an asymmetric market structure dominated by powerful players are the new development factors; they determine productive capacity and wealth creation.

Producers in the ILDCs find it difficult to add value in the production process. Their low absorptive capacities related to learning and knowledge is directly correlated to the difficulties they face in enhancing their productive capacities and capabilities, increasing efficiency and productivity, breaking down barriers to competition through the creation of an enabling business environment: all of which cannot be taken in isolation. In addition, weak support institutions and generally inadequate infrastructure are not conducive to lowering transaction costs. The business environment, institutional upgrading, public private partnership approaches to enterprise promotion and policies pertaining to the building of both productive and trade capacities should be embedded in a culture of innovation and learning.

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greater value-added. The involvement of the private sector should focus on changing the general trading culture of many industrialists. A special global forum might be held to raise awareness of these issues.

1.3. Low productivity and missed export opportunities

1.3.1 Productivity and export

In Africa, differences in labour productivity across firms of differing size are substantial measured in terms of value-added per employee 16]. In micro-enterprises, value-added per employee in dollar terms is three to four times higher than in larger enterprises. Variation across sectors is also substantial. The range of physical capital per employee across firms of differing size is even larger than that for labour productivity. Differences in the physical capital endowments across the firms are a much more important determinant of differences in labour productivity than differences in human capital measured in years of education and tenure. There is no clear evidence that large firms have higher labour productivity than small enterprises. The fact that large enterprises have more capital per employee (capital intensity) is not necessarily an indication of higher labour productivity, although greater capital intensity usually implies higher labour productivity.

The correlation between productivity growth and propensity to export is worth examining. A marked propensity to export despite relatively low productivity is often explained by the absence of an adequate enabling business environment. The rates of return on physical and human capital and productivity at the enterprise level are clearly correlated. The rates of return on physical capital are far higher than those on human capital. The rates of return on capital could be affected by increased investment. If investment costs were low, high returns on physical capital would imply high investment rates. In Africa, investment in firms in the manufacturing sector is often low. From a sectoral perspective, it is worth highlighting the “productivity” of the sector through the use of a benchmarking approach or peer reviews (comparing data within the sector and within a sub-region).

The issue of export becomes fundamental to understanding the specialization process. Relatively few firms in Africa export; most of them are not specialized in exporting. It is therefore difficult to sustain productivity and upgrade in terms of increasing the technology content. Mastering the segmentation factor previously mentioned is essential to reducing missed export opportunities. The differences in productivity are largely the outcome of the firms’ operational efficiency rather than the amounts of physical capital or even technology transferred. Exports are important to firms for several reasons. For example, the increased scale of operations and access to foreign exchange are significant factors. The latter facilitates the acquisition of capital goods from abroad; that, in turn, can boost productivity. Many economists argue that one of the main obstacles to entering export markets is the cost involved 17. To overcome this, firms have to produce at competitive costs; the only way to achieve this is by being productive (because greater productivity reduces the average cost of production). This explains the often observed statistical correlation between productivity and export-participation 18.

1.3.2 Increasing productivity

It is now accepted that relatively high productivity tends to go hand in hand with exporting; firms in small open economies that fail to achieve sufficiently high levels of productivity are

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16 Measuring or comparing productivity is still a difficult task. Difficulties in collecting appropriate data and availability of appropriate statistical data are some of the difficulties faced when trying to discuss the level of African enterprises productivity.


confined to the domestic market\textsuperscript{19}. The issue thus becomes one of increasing productivity. Enhanced competition is often put forward as a key remedy to low productivity. It is likely that among both formal and informal small and medium-sized firms, competition is fairly stiff, whereas among large firms, of which there are but few in Africa, real domestic competition hardly ever occurs. Interestingly enough, competition among small firms can only take them so far because they are too small to enjoy reasonable economies to scale. Large firms, on the other hand, exploit economies of scale but tend to be shielded from competition as long as they operate in a “closed” or “protected” market.

A good example are the former large state-owned enterprises (SOEs) in Africa that tended to be protected against competition and operate at low productivity levels. The question is whether on being privatized those enterprises maintained their productive capacity, increased their productivity or merely continued operating under a different ownership structure. For want of competition and given their sheer size, some of those enterprises have managed to stay in business. In the longer term, however, smaller domestic enterprises or foreign companies will seize whatever business opportunities there are, whereupon the former SOEs will either have to become more efficient or close down.

1.3.3 Increasing competition

One way of increasing competition among large firms propagated by major international financial institutions is to open them up to international competitors. While in theory the benefits seem to abound, the extent to which the presence of foreign firms yields any net benefits remains unclear. Three factors speak against positive net benefits. First, foreign firms often operate in extractive industries and repatriate their profits. Secondly, if scarce skilled labour tends to work in foreign firms rather than domestic firms, the latter’s productivity will be reduced. Thirdly, since African industries tend to be weak, permitting transnational corporations to compete on local markets can in principle crowd out domestic production. In the ultimate analysis, competition can have a negative impact on domestic private sector enterprises.

It is claimed that the major benefit to be derived from foreign firms is the transfer and diffusion of technology. Much of this occurs at the managerial and shop floor levels. The extent to which this newly acquired knowledge spills over to domestic firms is debatable. Moreover, it is questionable whether the knowledge is useful or the technology appropriate. Foreign firms also create job opportunities; here again, however, the openings are mainly for skilled labour. If, in the process, domestic firms have to shut down, the net employment generated could be negative. Industrial policies should take this into consideration when drafting competition policies. For technology transfer to be beneficial, the absorptive capacity of the economy needs to be strong. It cannot take place without strong support institutions. Otherwise, many of the positive effects of foreign presence will bypass the host country. The same holds true for technology transfer and diffusion through international trade; however, the difference in this case being that much of technology is embodied in capital goods and can thus be more readily applied to production. Furthermore, transaction costs in Africa are higher than elsewhere. Key to productivity performance in Africa is the development of the region’s human capital: a concept that relates to both education and health. Slight improvements in the quantity and quality of food can have an enormous impact on worker productivity. A broadly educated population is also important; emphasis should thus be placed on primary and secondary (in particular technical) schooling rather than tertiary education. Allowing women to complete their schooling will undoubtedly contribute to the creation of a skilled workforce. It is also likely that, as more people enjoy a better education and wages rise accordingly, the risk of a brain drain will diminish.

1.3.4 The need for support

Does the African private sector need support? Like any other private sector, it does and whatever helps to improve its productivity will increase its competitiveness. The public sector could lend support in the form of improved infrastructure, provision of adequate education and health systems, as well as general institutional support to increase domestic savings and investment. It could thus help to create a healthy business environment (the cost of doing business appears to be higher in Africa than elsewhere). Administrative and legal barriers to the entry and exit of firms should be reduced in order to enable the more productive firms to survive and grow, even if it be to the detriment of relatively unproductive

\textsuperscript{19} Exceptions to this include firms in relatively large (for the region) economies such as Nigeria and South Africa.
companies. If best-practice technologies cannot be implemented, for whatever reason, governments should endeavour to remove or at least lower barriers to their introduction. The debate on the type of business environment to be created should be conducted within the context of a public-private partnership (PPP).

External support may also be needed; in particular when official funds are so constrained that a government can no longer assist private sector development. That support could include debt relief and official development aid to key sectors such as education and health. It could also take the form of help to ensure that the goods produced for the export market are of adequate quality, meet international standards and norms and are of relevance to the global segmented market. African firms need to increase their productive capacity to the point that they can compete internationally in terms of prices. The African private sector and governments should complement each other in their endeavours to build up trade capacity.

1.4. Key determinants of competitiveness

1.4.1 The need for a comprehensive approach

Many issues such as productivity, value chain, enablers competitive environment, technology content, infrastructure and support institutions are considered key determinants of competitiveness. In global production networks and their segmented systems, however, it is important to concentrate on a holistic approach. UNIDO has promoted the national learning process or system supporting interaction between factors and actors in the interest of collective efficiency: another key determinant. Trade, industrial policies, macroeconomic conditions, location and resource endowments, human capital and technological endeavours, as well as the nature of factor markets and institutions are all related factors; they should be duly considered within the framework of public-private partnerships. One outcome of the regional NEPAD/APCI sub-regional conferences has been the establishment or strengthening of those partnerships with the objective of forging stronger links between innovation and productive capacities/capabilities. Many countries have been advised to focus their industrial development performance on a technology-driven economy which, in turn, should ensure high growth rates. In fact, as mentioned by Sanjaya Lall, it is “Skill development, industrial specialization, enterprise learning and institutional change create cumulative, self-reinforcing processes that promote or retard further learning. Countries set on a pattern with a low-technology, low-skill and low-learning specialization find it increasingly difficult to change course without a concerted shift in a large number of interacting markets and institutions”\(^\text{20}\). A comprehensive approach is therefore required when designing programmes and projects in support of productivity enhancement.

The one-way solution directed exclusively towards “economic liberalization” does not contribute to the development of a comprehensive approach nor does it engender cumulative advantages. All too often endowments such as natural resources and cheap unskilled labour per se are not conducive to creating the dynamic and innovative culture needed to sustain growth and structural change. Marginalization and the inability to participate meaningfully in the global production networks and segmented system thus become almost inevitable. Most ILDCs fall into the trap of maintaining local production cultures based on “static” approaches and entrenched in “declining markets” while still pursuing obsolete import-substitution policies. In other words, they continue to import technologies, services and products without mastering the requisite production, servicing and maintenance skills. Productive capacity initiatives must abandon this long outdated approach.

They should learn the lessons of agglomeration (the cluster approach) that open up opportunities for industrial “leapfrogging”. The acquisition of technology from abroad is embedded in local centres of excellence or learning centres; they provide optimal access to the latest technologies and know-how. Given the pressure emanating from profit-oriented transnational companies, this comprehensive leaning process should be stepped up. However, if not adequately backed by government, a conflict with external technologies and know-how might occur, much to the detriment of the ILDCs. New capabilities need to be set up as part of national or regional learning processes. It would even be more effective, were it to be focused on a particular sector (such as leather and leather products) or a crosscutting issue (such as information and communication technologies).

With a major part of the ILDC economies based on low-wage productive capacities, resource mobility becomes another key determinant of competitiveness. It is universally accepted that technical change erodes the competitive advantage of cheap and unskilled labour. Countries cannot build their industrial performance strategy on static factors. The quality of local capabilities and institutions becomes another key determinant of the ability to attract and use foreign resources. The global production network is based on interactive specialization. Leading players in each value chain rely increasingly on independent suppliers of value-added inputs, services and innovations. Africa should recognise as a given the fact that the overall objective in a competitive environment today is to structure the national/regional economy towards a knowledge-led economy based on gradual mastery of technological "niches" at the local level. Global and local ("glocal") visions are of paramount importance: a point emphasised during the NEPAD/APCI regional conferences. As a consequence, it was requested that an "observatory" be established to maintain a watch on developments related to competitiveness and employment creation so as to alert productive actors to changes in the global market and their impact on national and regional markets.

The Africa Commission of the UK Government recognised the Africa Productive Capacity Initiative as one means of diversifying and reducing dependence on volatile commodity and mineral sectors. Coherence needs to be strengthened between national and regional industrial development strategies on the one hand and global economic dynamic changes on the other. This would bring about the creation of additional wealth derived from sound productive capacity and secure greater gains from trade. Forging industry's links with both agriculture and trade is central to all stakeholders in the process, including UNIDO, NEPAD, CAMI and the African Union.

1. 5. Improving competitiveness in the private sector in Africa

1.5.1 Measuring competitiveness

In its Industrial Development Report 2002/2003, UNIDO highlighted the fact that some of the main structural "drivers" (enabling factors) of industrial competitiveness are FDI, domestic R&D, skills, licensing and physical infrastructure. Even using the UNIDO Competitive Industrial Development Index, it is clear that competitive industrial performance cannot be assessed in a readily comprehensible form for want of reliable statistics. Statistics and disaggregation are not enough. They should be complemented by a peer review system. At the end of the day, it is the quality of the work performed by the private sector actors themselves that offers a good indicator of industrial performance. It is therefore crucial to support the African private sector as enterprises gradually adapt to the new global industrial segmentation and shift away from a culture of assistance and non-productive rent-seeking approach to an innovative culture of building productive capacities and capabilities. If they are to be successful, they will have to stop working in isolation.

1.5.2 Private sector considerations

It is generally agreed that the creation of wealth and reduction of poverty are closely correlated to economic growth, which in itself is directly linked to the volume of sustainable investment entering a country or region. It should be recalled that compared to other developing regions, Africa, especially sub-Saharan Africa, does not receive excessive amounts of private investment. Support to the private sector in Africa presupposes the pursuance of clear policies with predictable incentives designed to promote sustainable private investment and build support institutions. Three key enabling factors that help to improve competitiveness are:

- Direct support to small and medium enterprises using technical assistance funds to provide business advisory services, upgrade overall productive capacity building and introduce training activities related to entrepreneurial development. A one-stop-shop approach that not only provides solutions to the SMEs but also helps to reduce costs associated with bureaucracy is called for.
- Advisory services including the maintenance of a watch on developments are fundamental to success in a segmented production system based on value chains. SMEs in Africa should be "embedded" in a system where support is assured throughout the operational cycle.
- A predictable investment and business climate is necessary to attract private investment that does not need to rely on public sector guarantees. Providing an enabling business environment for enterprises and promoting public-private sector
dialogue through peer review mechanisms are key to raising collective awareness and securing proactive responses from both the public and private sectors.

Innovative approaches are very much part of cultural change. The private sector should be more adequately represented in the group of donors lending support to the private sector. For example, it is important that private sector representatives be an integral part of the poverty reduction strategy programme process at the country level. Consultations are not enough. Jointly preparing such programmes could secure the incorporation of private sector views at the very outset of the process, thus contributing to a change in the donor-driven approach to supporting the private sector as though it were the public sector.

1. 6. A strategic approach to promote productive capacity

1.6.1. The three-step process

As a follow-up to the recommendations of the Third United Nations Conference on Least Developed countries on the role of industrial growth in alleviating poverty in those countries and after NEPAD had been launched as Africa’s new approach to improving political and economic governance, UNIDO reoriented its approach towards Africa and shifted gradually to the promotion of integrated programmes/projects. Not only did the African Ministers of Industry, NEPAD and African Union and the African Heads of States approve the NEPAD component on sustainable industrial development based on the African Productive Capacity Initiative developed by UNIDO, but the African and international community also recognised that any new efforts directed towards industrialization in Africa should come primarily from within Africa itself. This is very much in line with the MDGs and represents a comprehensive attempt to reach a common African position on mobilizing resources and expertise in support of the region’s industrialization. Joint efforts and partnerships constitute the very basis of this newfound spirit of cooperation. This particular approach should also be embodied in the design and implementation of projects and programmes related to productive and trade capacities in Africa. Earlier approaches based on sectoral or crosscutting entry points need to be integrated if they are to compete successfully in a global setting. The overall objective is to transform comparative and competitive advantages into cumulative advantages for Africa. Three key steps are essential to enhancing productivity at the local, regional and global levels:

- **Linkages**: improving internal and external linkages in building competitive productive capacities and capabilities;
- **Leverage**: leveraging growth by reducing barriers to competition at all levels; and
- **Learning**: promoting a learning and innovative culture through clustering and networking approaches.

These three steps make for the emergence of an innovative culture and processes, while generating value-added in each segment of the production network. Productivity enhancement is the ultimate goal. The major change over previous “stand-alone” approaches is the manner in which development stakeholders, including the private sector, organize themselves when promoting comprehensive programmes. UNIDO will focus on NEPAD priorities, special consideration being given to regional integration and cooperation (See Graph 4). The way forward might be to ensure predictable joint cooperation between African Development stakeholders in the preparation of comprehensive programmes, with NEPAD covering both sectoral and crosscutting issues. Selected examples of specific actions are provided in the annexes.

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22 NEPAD, www.nepad.org
7. Supporting the industrialization of Africa: regional programmes with NEPAD

1.7.1 A common vision

This New Economic Partnership for Africa's Development\(^{23}\) is a common vision based on a shared conviction that Africa’s leaders are duty bound to eradicate poverty and set their countries, individually and collectively, on a path towards sustainable growth and development. To that effect, they should participate actively in the world economy. The private sector should take on a proactive role. Moreover, NEPAD has set up the NEPAD Business Group to ensure proper coordination between the public and private sectors in keeping with the NEPAD vision. The programme is soundly based on the determination of the Africans themselves to assume responsibility and ownership and extricate themselves and the region from the vicious circle of poverty and transform it into a virtuous circle of wealth creation.

The NEPAD objectives in respect of manufacturing, productive and trade capacities can be summed up in three key points:

- To increase production in, 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 establish national standards bodies throughout Africa;
- To harmonize national technical regulatory frameworks.

For the private sector, the main objective is to ensure a sound and enabling environment for private sector activities, with particular emphasis on domestic entrepreneurs. Two key objectives should be addressed when building up productive capacity:

- To promote foreign direct investment and trade, with particular emphasis on exports;
- To develop micro, small and medium-scale enterprises, including the informal sector.

1.7.2 Specific actions

NEPAD suggested the following specific actions; they will need to be revisited in the context of global production networks and the segmented production system.

- **At the African level:**
  - Undertake measures to enhance the entrepreneurial, managerial and technical capacities of the private sector by supporting technology acquisition, production improvements, and training and skills development;
  - Strengthen chambers of commerce, trade and professional associations, and their regional networks;
  - Organize dialogue between the government and the private sector to develop a shared vision of economic development strategy and remove constraints on private sector development;
  - Strengthen and encourage the growth of micro, small and medium-scale industries through appropriate technical support from service institutions and civil society, and improve access to capital by strengthening micro-financing schemes, with particular attention to women entrepreneurs.

- **At the international level:**
  - Promote entrepreneurial development programmes for training managers of African firms;
  - Provide technical assistance in relation to the development of an appropriate regulatory environment, promotion of small, medium and micro-enterprises and, establish micro-financing schemes for the African private sector.

Given the fundamental changes in the way global and local actors approach production,, UNIDO needs to be innovative and demonstrate its commitment to the MDGs. With donors moving increasingly from basket funding (multi-donor contributions to programmes in the field) to general budget support to governments to implement their own programmes, it is important to establish a core group for resource mobilization composed of major stakeholders in the NEPAD initiative on sustainable industrial development. A partnership comprising NEPAD, the African Union, private sector representatives (viz. NEPAD Business Group), regional economic communities and government representatives, should ensure that all regional programmes take account of the value chain approach and the segmentation of the production system and enjoy counterpart support.

It is important to analyse the cross-border activities of firms. The new approach to industrial development will gradually replace the obsolete state-centred form of analysis. Within the context of a global production network framework, it is vitally important that industrial leaders understand and master the dynamics of global organization of production and the subsequent division of labour. Employment generation and the creation of decent sustainable jobs are directly related to decisions on productive capacity building. This calls for a regular updating of local and global regulations, competition policies and economic integration. Industrial upgrading must be firmly bedded in a learning-led approach to industrial development, with special emphasis on flexible small and medium enterprises.

Overall private sector objectives in Africa should focus on sustaining shared economic growth, creating wealth and increasing security through poverty reduction. Flexibility and adaptability in all forms, products, management, processes, systems and policies are required. Innovation must be an on-going process based on learning from mistakes, capitalizing on successes and drawing on best practices. With aid funding for productive capacity activity on the decline, it is essential that private sector capacity and capabilities be strengthened.

As part of a NEPAD Business Group programme, donors and stakeholders should focus on three main features of a comprehensive productive capacity strategy:

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• Improving the on-going process of creating an enabling policy environment with special focus on reducing barriers to competition. This could be achieved by:
  
  (a) Initiating a public-private policy dialogue and setting up global peer review fora for improved business decisions;
  (b) Improving legal and regulatory frameworks in order to attract investment in new innovative culture.

• Networking with investment and financial bodies in order to leverage or access larger investment flows to SMEs;

• Develop businesses and products that take account of the segmentation of global production, while focusing on selected key sectors and crosscutting issues (see Annexes 1 and 2).
PART 2 - BUILDING TRADE CAPACITY: THE NEED FOR COMPLIANCE AND CONFORMITY
PART 2 - BUILDING TRADE CAPACITY: THE NEED FOR COMPLIANCE AND CONFORMITY *

Abstract

After a general introduction, the paper describes the role of trade in stimulating growth and fighting poverty. For all the potential benefits of trade, most developing countries have failed to reap significant gains from trading opportunities in rapidly expanding liberalised markets.

In its second section, the paper describes the main reasons for this failure and focuses on the constraints on supply-side capacities, most particularly as they relate to standards compliance and conformity assessment issues.

In its third section, the paper offers definitions of trade capacity building and provides an overview of interventions to date, particularly in Africa. It describes the main multilateral initiatives, with particular emphasis on the strategies and initiatives launched by UNIDO. The paper presents four OECD principles related to ensuring the success of trade capacity building endeavours and adds a fifth: larger allocations to combating supply-side constraints and promoting standardisation, metrology, testing and quality assurance.

In the final section, the paper highlights a series of issues that the experts might wish to take up in their deliberations.

2.1. Introduction

The evolution from protectionism to liberalization in the global trading system and the emphasis on development in the Doha Round offers opportunities for the advancement of trade and industry in Africa. However, most countries in the region have failed to reap significant benefit from trading opportunities in expanding markets and concessionary schemes such as the African Growth and Opportunities Act (AGOA) and Everything But Arms (EBA). This paper argues that the reasons for Africa’s failure to benefit from these opportunities are not primarily related to tariff barriers. They relate to: the lack of productive capacity needed to ensure necessary quantity and quality of supply; inability to prove compliance of potential export products with international standards and the problems with integration into the multilateral trading system.

African enterprises need to develop regional value chains and link with global supply chains to market their products internationally. SMEs, which predominate in African economies, have inherent difficulties with access to capital, productive capacity, technology and servicing because of resource limitations. If these enterprises are to trade on global markets, they need to build capabilities to increase their supply capacity, quality, competitiveness and conformity with importer-mandated product standards. This involves both increased investment at the enterprise level and government backing in introducing and improving support to productivity and technology extension services, training, export consortia and cluster development. Clearly, in the present global setting the role of such intermediaries becomes even more important. They can provide support for building capabilities to use new technologies, adapt and improve processes and products and move up the value chain into more sophisticated production activities.

Standards and technical regulations drawn up by individual countries to protect health and the environment, as well as to ensure quality and safety, can also act as technical barriers to trade. In addition to technical regulations and product standards, African exporters face the more stringent private standards of developed country retailers. Increasingly, international buyers require effective application and recognised proof of enterprise system management standards such as ISO 9000 for quality management, HACCP and ISO 22000 for food safety, ISO 14000 for environmental management and SA 8000 for social accountability.

Enacted in 1995, the World Trade Organization (WTO) agreements pertaining to technical barriers to trade (TBT) and sanitary and phyto-sanitary measures (SPS) in effect legalised the use of standards and technical regulations in global trade. The agreements define the

* This part of the paper has been drafted by Mohamed Lamine Dhaoui and Rishi Chopra with inputs from Lalith Goonatilake, Olga Memedovic, Gerardo Pataconni and Fabio Russo, UNIDO, Vienna (Austria).
non-discriminatory use of those standards and regulations, while recognizing that developing countries need to have the necessary infrastructure for standards and conformity in place in order to fulfil their commitments. The two agreements specifically mention the difficulties developing countries have in this area and include provisions for technical assistance although, to a large extent, this has still not happened.

Increasing supply capacity is essential to, but not sufficient for, gaining entry into world markets. Proving conformity with standards and technical regulations requires establishing efficient testing, certification and accreditation mechanisms that conform to the requirements of the SPS and TBT agreements and enjoy international recognition. Testing, calibration and certification facilities thus take on extreme importance for African countries wanting to benefit from trade opportunities.

To date, the trade facilitation support through existing multilateral programmes such as the Integrated Framework for Technical Assistance to Least Developed Countries (IF) and the Joint Integrated Technical Assistance Programme (JITAP), as well as individual agencies such as the World Bank, United Nations Conference on Trade and Development (UNCTAD), and the International Trade Centre (ITC) have largely focused on trade-related policies, cross-border facilitation issues such as improving customs procedures, efficiency, transparency, transport and port development, governance and export promotion. Although the initial IF needs assessment included supply capacity and conformity, subsequent IF activities concentrated more on the individual mandates of the participating agencies. Clearly the Aid for Trade initiative should build on the experience of the IF to date and aim to fill such a gap by expanding the areas of intervention to supply capacity and conformity.

UNIDO has a long track record of developing supply capacity (technology transfer activities in such areas as agro-processing, cluster development, cleaner production, hygiene and quality management and export consortia) and building standards and conformity infrastructure (standards bodies, product testing laboratories, inspection services, certification bodies and accreditation systems) over the past 30 years. The Organization currently holds the largest trade capacity building (TCB) portfolio among all the multilateral agencies listed in the WTO/OECD database. Implementation reached $39.8 million in 2004, having increased rapidly from $7.6 million in 2002.

The growing realisation of the need for this type of technical assistance has also led UNIDO to formulate a more holistic approach to trade capacity building, drawing into the initiative many established and successful programmes such as competitiveness analysis, cluster development and the promotion of export consortia. The resulting approach is problem-oriented and not limited to the mandate of UNIDO. It actively integrates the areas of expertise of other bi- and multi-lateral development partners and can be summarised around the three key areas of intervention, the ‘three Cs’: supply Competitiveness, demand Conformity, market Connectivity. While promoting supply competitiveness and demand conformity are the main areas of the Organization’s competence, market connectivity provides the link to other agencies such as WTO, UNCTAD and ITC.

The trade capacity building approach adopted by UNIDO is in line with the capacity building needs identified by The New Partnership for Africa's Development (NEPAD) Market Access initiative. The approach has been recognised by the UN General Assembly. It is also reflected in major donor initiatives for trade/export development, such as the Norwegian Agency for Development Cooperation (NORAD) and the Swedish International Development Cooperation Agency (SIDA) strategy for export development in Africa. This approach also constitutes the basis for the cooperation between UNIDO and WTO in trade-related technical assistance.

The technical know-how and experience that UNIDO has acquired in programme conceptualisation, implementation and fund-raising in the field of building supply capacity and conformity infrastructure, together with the Organization’s extensive field presence, are valuable assets in the context of trade-related technical assistance. UNIDO stands ready to contribute to the efforts of the African Union (AU) and other development partners to make the Aid for Trade initiative a success for Africa in general and for the least developed countries (LDCs) in particular.
2.2. Trade, industry and poverty alleviation

2.2.1 The global context

The achievement of the UN Millennium Development Goals, especially poverty alleviation, is still an elusive target. Since 1980 the number of people living in poverty (earning less than $2 per day) has risen by 50% to 2.8 billion\(^{25}\). Between 1981 and 2001, the number living in absolute poverty (less than a dollar a day) worldwide fell from 40% to 21%, but in the Sub-Saharan region the figure rose from 42% to 47\(^{26}\). The divide between the rich and the poor, between nations and within nations, continues to widen. Urgent remedial action by the international community is called for; failure is not an option.

The advance of the global trading system from protectionism to liberalization, with the Doha Development Agenda as a landmark still to be achieved, offers major opportunities. World trade has risen from $1.0 trillion in 1970 to the current (estimated) level of $14.4 trillion\(^1\). But the development is lopsided. The share of developing countries is still only around 25%\(^{27}\). While the newly industrialised countries (NICs), China, India, Chile and some others have gained, many other developing countries in Africa and the LDCs have fallen back in the highly competitive and regulated markets that trade liberalisation has created.

![Figure 1: World trade development, 1970-2003](Source: UNCTAD)

Historically, the natural progression of countries in export trade has been from commodities to labour-intensive manufactures to higher technology goods to capital goods and, finally, to the services sector. WTO negotiations for the liberalization of the service sector have yet to come. Most developing countries and LDCs, however, are either in labour-intensive manufacturing or drawing up plans to enter that area. Many are active in agro-processing, which requires less investment and technology, while a small number are to be found in high technology or services (besides tourism).

2.2.2 Trade, industry and poverty reduction

> "I am proposing that industry-related trade issues should be accorded greater importance since the industry-trade-development-poverty nexus is of major concern to developing countries in the light of the Doha Round of trade negotiations and regional initiatives such as NEPAD."

Dr. K. Yumkella, UNIDO Director-General

(Towards Pro-Poor Sustainable Industrial Development: A Shared Vision for UNIDO, 2005)

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The role of an open trade regime in stimulating growth and fighting poverty has been widely researched and debated by academic economists. According to one study, an increase of one percentage point in the share of trade in gross domestic product (GDP) raises income by at least one-half of one per cent. The same study suggests that trade increases income by spurring investment in human and physical capital, as well as by stimulating productivity. Empirical analysis of country-specific data also confirms the existence of a link between economic growth and poverty reduction. For example, the experience of India, over the past two decades, shows a correlation between growth and poverty reduction on the one hand and increased openness to trade on the other.

Trade is inextricably linked with growth and poverty alleviation in developing countries. The developing countries’ low internal purchasing capacity cannot support industrial expansion: it requires the expansion of trade to achieve sustainable development and create employment. The World Bank estimates that a successful Doha round could lift 140 million people out of extreme poverty. The impact on Africa alone would be an additional income of $70 billion, about five times the current aid flow to the continent.

The poverty-reducing effects of an open trade regime are likely to be stronger in the case of developing countries because trade in goods is a more important source of income than in the developed world. However, the relatively large share of trade in developing country GDPs also means that their economies are more exposed to volatility in demand. The LDCs are extremely vulnerable; their export earnings tend to depend on one or two commodities, for which current world prices are inordinately low.

Greater participation in international trade has replaced import-substitution industrialisation as the key development policy of developing countries. In the liberalized and competitive global markets, developing countries have to: (i) enhance their industrial supply capacity; (ii) conform to an increasingly complex and ever-expanding rules-based international trading system; and (iii) ensure cleaner and sustainable production.

2.2.3 The position of African countries in global trade

Over the past 20 years, Africa’s share of world exports has fallen from 4.5% to 2.4%, while the number of people living in absolute poverty has increased from 42% to 47%. In terms of manufactured exports, Africa lags behind every other region; a mere 0.9% of its total exports are in manufactured goods (see fig 2). This contrasts sharply with developing countries as a whole, which currently account for roughly one third of global manufactured exports, up from 18 per cent in 1980. Moreover, while South-South trade has increased to account for some 40 per cent of the developing countries’ total exports, the share of Africa in South-South exports of merchandised goods has declined from 5.4% in 1970 to 2.3% in 2003.
A recent study by the Economic Commission for Africa (ECA) on the incidence of non-tariff barriers shows that 48% of agricultural and fish exports from LDCs to developed economies face non-tariff barriers such as product standards, phyto-sanitary and environmental controls and are more likely to be subject to anti-dumping measures. This is significant since Africa’s greatest comparative advantage lies in agro-based industries. In addition, the large number of TBTs that exist between the developing countries themselves merely serves to make matters worse. It is estimated that 70% of the benefits from a successful Doha Round would accrue to developing countries as a result of increased South-South trade.

2.3. Failure to benefit from trade and the contributing factors

The multilateral trade regime has created an environment in which the most competitive countries benefit most from trade liberalization. Without efficient supply-side capabilities, developing countries will not be able to participate meaningfully in international trade nor will they benefit from it. Developing countries must improve the competitiveness of their products and services through efficient upgrading of their industrial productive capacity at both the institutional and enterprise levels. In Africa, in common with most developing countries, a number of factors at both levels hinder effective participation in global trade. These factors include macro-economic instability, lack of human and physical capital, weak infrastructure and economic governance institutions, as well as a poorly developed private sector.

2.3.1 The major impediments to trade in Africa

Lack of supply capacity

The foremost impediment is a lack of capacity to produce a surplus of exportable goods of sufficient quantity, stable quality and required standard that can be traded internationally. As the United Nations Secretary-General, Kofi Annan, said “LDCs have neither the surplus of exportable products nor the production capacity to take immediate advantage of new trade opportunities. They will need substantial investment and technical assistance in order to expand their production.” On the production side, major constraints include: a labour force that is hampered by poor health and insufficient nutrition; a labour force suffering from a lack of education and training; an infrastructure unable to cope with adverse geography, the landlocked situation and erratic energy supplies; and capital equipment that is often old and cannot be easily replaced for want of funds (limited access to finance). These constraints result in production at relatively low utilization rates and equally low productivity levels.

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35 UNECA Study (2005).
36 None the less, the stark truth is that only a small proportion of produce is being processed. Taking cotton production as an example, market prices rise along the value chain from raw cotton to carded/combed to yarn. Yet 96% of Africa’s cotton exports are in raw cotton, whereas 90% of East and South Asian exports are in the form of processed yarn (UNIDO, 2005).
At the enterprise level, African countries suffer from a lack of: (i) capability to assess and address their technical needs; (ii) sufficient technology to respond to rapidly evolving markets; (iii) adequately trained skilled workers (human capital); (iv) effective industrial productive capacity (physical capital); and (v) access to finance.

All this underscores the need for financial resources and technical assistance in the area of productive capacity upgrading. Not only do productive sectors with high export potential have to be identified through a comprehensive market and product analysis, but in the interests of both socio-economic and environmental sustainability, scarce resources have to be efficiently and effectively allocated to the sectors so identified. Diagnostic and upgrading programmes have to be formulated for the pilot enterprises selected and matching investment programmes implemented.

In the final analysis, upgrading productive capacity yields improved competitiveness which, in turn, allows developing countries to: (i) produce higher value-added products; (ii) enter/capture more markets; (iii) experience trade growth; and (iv) enjoy the benefits of employment creation and poverty alleviation.

These and other aspects are covered extensively in the paper on improving productive capacity.

Lack of comparative analysis

Given that 75% of global trade today is in manufactures, attaining and maintaining competitiveness in the manufacturing sector calls for continuous monitoring and assessment of global and regional trends in both manufacturing and trade. Identifying sectors or sub-sectors that have the greatest competitive potential and are sustainable in the medium and long term takes on particular importance. Starting from an overview of competitive performance of the industrial sector as a whole, it is possible to work down to an assessment of sectoral performance and of performance at the product level and see which stages in the production process yield the greatest share of manufacturing value-added or at which stage competition from peers is weakest or strongest. Competitive analyses become essential tools in ensuring that scarce resources are allocated efficiently and are focused on a sector or sub-sector that stands to benefit most from industrial upgrading, productivity enhancement or enterprise restructuring.

Tariff and non-tariff barriers to international trade

A World Bank study carried out in 2002 established that low-income countries face tariffs on global markets that are more than double those faced by non-poor producers. To make matters even worse, these market access barriers are particularly high in sectors where developing countries have a comparative advantage such as agriculture and labour-intensive manufacture. Non-tariff measures, which include agricultural subsidies, antidumping duties and threats, as well as rules of origin also affect the trade performances of developing countries, especially in the manufactured goods sector 40.

Inability to meet market standards, conformity and certification requirements

Recent enterprise surveys41 in both developed and developing countries show that the highest non-tariff barriers include performance standards, product quality standards, technical measures, product requirements relating to standards and technical regulations, conformity assessment, labelling and testing, and certification requirements42. Meeting those market requirements call for upgrading skills and capabilities, mastering new technologies, and enhancing old and establishing new institutions (e.g. accreditation bodies, metrology, standardization and technical support facilities). The costs implications can be very high relative to the value of exports, they can thus pose a formidable barrier to exports.

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41 Including those carried out in Africa under the UNIDO-WTO joint programme.
42 World Bank: Press Release (September 12th, 2003), World Bank Announces Stepped-Up Trade Assistance Programme; Washington, DC (USA).
Poor infrastructure at the institutional level

The problems related to poor export and infrastructure capacities include a low skill base, low level of technology adoption, absence/weakness of institutions to support private sector development (industry associations, export agencies, productivity centres, technology information centres, marketing boards, R&D laboratories and cluster development programmes) and weak capacity for the mobilisation of domestic and foreign investment.

Lack of effective market integration

Establishing a successful presence in foreign markets is considerably more difficult than in domestic markets. SMEs, which constitute the large majority of African enterprises, are often deterred from exporting by the complexities of the export business and the high risks involved. Without significant knowledge and preparation, attempts to export are doomed to failure and may even jeopardise the financial stability of the enterprise as whole. Evidence suggests that particularly during the early stages of exporting, failure rates are relatively high. To develop export markets, significant know-how, effort and financial resources are needed. Foreign markets have their particularities and stringent requirements. By cooperating within an export consortium that combines the expertise and financial resources of several firms, the enterprises can reduce their risks, improve their profitability, secure efficiency gains and accumulate know-how.

2.3.2 The need for compliance and conformity

In today’s global market, meeting standards or other technical requirements (certification, measurement, testing) has become essential to trade success. The International Development Research Centre in Canada found that countries that cannot meet standards and regulations in developed country markets are effectively barred from trading with those markets.

International standards make an important contribution to the global economy since they improve the efficiency of production and trade and reduce consumer costs. As a result, compliance with standards has become a requisite for the expansion of inter-regional and international trade. However, standards and technical regulations drawn up by individual countries to protect health and the environment, as well as to ensure quality and safety, can also act as technical barriers to trade. Increasingly, international buyers require effective application and recognised proof of enterprise system management standards such as ISO 9000 for quality management, HACCP and ISO 22000 for food safety, ISO 14000 for environmental management and SA 8000 for social accountability, as well as private-sector-led standards such as EUREPGAP. The situation is made all the more complex with the emergence of an ever-increasing number of product-specific standards.

For the most part, these 'market requirements' can be classified as TBT or SPS measures. Despite the WTO TBT and SPS agreements 43 reached in the context of the Uruguay Round and designed to 'ensure that technical regulations and standards do not create unnecessary obstacles to trade', such market requirements can still constitute non-tariff barriers that obstruct access to markets. The obstruction is all the larger since thousands of new standards and private product specifications, as well as related conformity assessment procedures, are being introduced each year.

For most developing countries, standards have become impediments to trade. Products often fail to comply with international standards and certification requirements. The technical regulations and standards applied, including packaging, marking and labelling requirements, are often incomplete or incompatible with international standards. Furthermore, African countries often do not have the necessary laboratory facilities to test and certify goods for developed markets, while the tests their laboratories perform and the certificates they issue are not recognised in export markets.

As a result, African countries need to enhance (or establish) institutional infrastructure to ensure that they produce goods that are of a standard that can be sold on the global market. They also need to upgrade standardisation agencies and services alike, as well as develop - where appropriate - national testing, certification, inspection, laboratory and accreditation

43 Discussions are taking place at the WTO on how to deal with private-sector standards and their relation to the TBT and SPS agreements.
infrastructure that conforms to the requirements of the WTO SPS and TBT agreements and thus enjoys international recognition. Finally, they need to combat the lack of awareness on standards and regulations and the lack of investment in creating a solid knowledge base at both the institutional (R&D) and human capital (training) levels.

African producers must be able to prove the reliability of their test data and inspection procedures, as well as the conformity of their products to international standards and/or those applied in the recipient country. Testing, calibration and certification facilities are therefore of extreme importance. In the industrialised countries this infrastructure is taken for granted; for the most part, it passes unnoticed. The developing countries, however, particularly the LDCs, lack even the most rudimentary elements of the complex infrastructure. If such facilities are not recognised internationally, a country’s trade potential is seriously hampered and the prices its products can command on global markets are correspondingly low. Moreover, local metrological and testing capabilities reduce the associated costs for products that would otherwise either have to be tested abroad or locally by international certification companies at very high rates. Effective assessment also provides domestic companies with objective results that are essential to improving designs and technologies and assuring quality.

In addition, weak quality infrastructure (standards, conformity assessment, import inspection, markets surveillance) has a marked negative effect on African economies and their citizens. The weakness also prevents countries from controlling the quality, quantity and safety of imported and locally produced goods. African countries thus become the ‘dumping ground’ for low quality/sub-standard products that can cause dramatic health problems for the local consumers and reduce further the ability of domestic producers to compete in terms of price with imported goods.

If African countries are to meet standards and conformity requirements, major investments are needed to establish and upgrade the standardisation, metrology and conformity assessment infrastructure. For example, UNIDO estimates that the added cost to the developing countries of complying with food and safety regulations for the export of shrimps to the EU market is as follows: (i) 2.8% cost increase for testing and compliance activities; (ii) 5% cost increase for setting up quality and safety activities at the enterprise level; (iii) $ 5 – 25 million for setting up quality and testing infrastructure at the national level. In another instance, the World Bank has estimated that the Ugandan honey industry would require up to $ 300 million to construct the processing facilities and purchase the equipment needed in order to be able to conform to ISO food safety standards, while the Ugandan coffee producers would, on average, see their production costs go up by 200%, if compliance costs for good quality coffee were included44.

2.3.3 Beyond compliance

In addition to their being hampered by supply-side and technical constraints, the developing countries’ failure to exploit the export opportunities offered by the liberalised global trading system is compounded by shortcomings in such essential trade-related requirements and procedures as registration and documentation, customs valuation, import regulations, licensing and similar issues. Strengthening customs capacity, issuing import/export licences more effectively, extending computerisation, improving pre-shipment inspection methods, increasing the transparency of the rules of origin more strictly and simplifying import/export procedures would facilitate the cross-border movement of goods as well as heighten credibility in export markets. Similar benefits stand to be gained by improving transportation facilities at ports and airports.

The effective dissemination of international trade rules, particularly those agreed within the context of the WTO, as well as regulations governing financing, direct investment and exchange measures in various countries reduce the scope for misunderstandings and result in fuller integration with the international trade framework. This information and effective market intelligence enable the developing countries to keep pace with shifts in global market trends. If the small and medium enterprises in the least developed countries in particular are to make use of the vast amount of information required to improve productivity, they need that information; however, they need operational solutions as well.

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One such operational solution is the creation of export consortia, which are voluntary alliances of firms with the objective of promoting the export of goods and services of their members through joint actions. The two main types of consortia are promotional and sales consortia. Promotional consortia are created to explore specific export markets by sharing promotional and logistical costs among participating firms. Actual sales, however, are the responsibility of the individual firms. Sales consortia, on the other hand, also perform business promotion activities, but they handle the sale of member firms’ products as well.

2.4. Main trade capacity building initiatives

2.4.1 Definition of terms

One concept, many definitions

Donors and agencies working with TRTA/CB usually see TCB as "one (out of many) means to promote economic development and reduce poverty, by supporting developing countries’ greater participation in the multilateral trading system and their integration into the world economy"\(^{45}\).

UNIDO defines ‘trade capacity’ as "the ability of domestic providers of goods and services to penetrate a related market in a foreign country"\(^{46}\).

According to the 2005 Joint WTO/OECD Report, TRTA and CB can be defined as activities that intend to enhance the ability of the recipient country to:

- Formulate and implement a trade development strategy and create an enabling environment for increasing the volume and value-added of exports, diversifying export products and markets and increasing foreign investment to generate jobs and trade;
- Stimulate trade by domestic firms and encourage investment in trade-oriented industries or;
- Participate in and benefit from the institutions, negotiations, and processes that shape the national trade policy and the rules and practices of international commerce.\(^{47}\)

Delivery of TRTA/CB

Activities in the field of TRTA/CB can generally be implemented via: (a) technical assistance or (b) financial assistance. Technical assistance includes such activities as training sessions, workshops, studies, and consultancies with the main objectives of either the provision of technical knowledge or of strategic advice on policy issues. Financial assistance is disbursed through loans or grants and has the key objective of overcoming a lack of capital\(^{48}\). TRTA/CB focuses on aiding the recipient countries in such a way that will subsequently allow them to carry out their trade-related activities in a sustainable and independent manner.

In that particular context, the proportion of ODA provided to help build trade capacity is an indicator used in connection with one of the targets set under the MDGs: more specifically in relation to making debt sustainable in the long term [Target 15]. It is quite conceivable that by building effective trade capacity and so increasing the potential for greater export earnings, trade capacity building can be seen as one of the principal sources for sustaining debt. In the ultimate analysis, it might well ensue that trade capacity indicators may be prescribed as a conditionality for ODA flows.


2.4.2 Progress to date

Overview

Over the past few years, aid for TRTA/CB has experienced a remarkable boost in the wake of increased awareness regarding the importance of technical barriers to trade. Both bilateral and multilateral donors have become much more active. The total for TRTA/CB-related assistance grew from just over $2 billion in 2001 to almost 3 billion in 2004. A similar upsurge can be observed in terms of the number of activities recorded; these increased from 4,339 in 2001 to 8,195 in 2004.

After a major increase in 2003, TRTA/CB remained stable overall in 2004, whereas commitments to trade policy and regulations decreased from $934 million in 2003 to $811 million in 2004. At the same time the volume of aid allocated to trade development rose by $140 million to reach nearly $2.2 billion in 2004. In addition, donors committed $9.3 billion to support economic infrastructure: transport, energy and telecommunications.

Focus on Africa

In 2004, the total amount of TRTA/CB committed to Africa stood at $980.7: nearly twice the amount in 2001 $599.2 million. This substantial increase reflects a rise in aid to both trade policy/regulations and trade development. The number of activities recorded in Africa also increased significantly over the same span of time. In 2004, trade development accounted for 83 percent of total TRTA/CB expenditure in Africa and trade policy/regulation for the remaining 17 percent.

In terms of the distribution of TRTA/CB-related aid between North Africa and sub-Saharan Africa, it can be seen that the southern part of the region attracts most assistance. In both 2001 and 2004, aid to sub-Saharan Africa was significantly greater than aid to North Africa. In 2001, total assistance in the area of TRTA/CB allocated to North Africa amounted to $154.8 million, while sub-Saharan Africa was allocated $417.8 million. Similar patterns can be found in 2004, when North Africa received 34 percent ($288.4 million) of total TRTA/CB-related aid, and sub-Saharan Africa 66 percent ($567.3 million). The only exception is trade policy/regulations aid to North Africa in 2001, which exceeded aid to sub-Saharan Africa in the same category by some $5 million. In both regions, assistance to trade development consistently outstripped that to trade policy/regulations.

In 2004, the main bilateral donors of TRTA/CB-related aid to Africa were the United States of America ($163 million), the United Kingdom ($4.4 million) and France ($24.9 million). In 2004, the EU delivered more than $169 million of TRTA/CB-related aid to Africa, $110 million of which went to trade development. In 2004 the largest multilateral donor of TRTA/CB-related aid to Africa was the International Development Association (part of the World Bank); it gave $80 million to trade development and $10 million to trade policy/regulations.

49 The figures and analysis in this section are taken direct from the 2005 WTO/OECD Report on TRTA/CB.
2.4.3 Major agencies and initiatives

Main agencies

As indicated in a joint WTO/OECD report covering the period 2001-2004\(^{50}\), UNIDO is the most active multilateral agency in the area of TRTA/CB. UNIDO TRTA/CB projects reached $39.8 million in 2004. They went on to increase to $64.6 million in 2005 and projects to the value of an additional $90.4 million are currently under negotiation with donors and recipient countries. The other major multilateral donors include ITC, which implemented projects worth $29.9 million in 2004, followed closely by FAO ($25.4 million) and WTO ($19.4 million).

Major Initiatives

The Integrated Framework for TRTA to LDCs (IF)

The IF, a multi-agency and multi-donor programme, was first set up at the WTO Ministerial Conference in Singapore in December 1996 and launched in October 1997. The participating agencies are the IMF, ITC, UNCTAD, UNDP, the World Bank and WTO. In July 2000, the agency heads met to review the programme and recommended several changes in order to enhance its effectiveness. The number of countries benefiting from the IF has grown steadily; at the end of March 2005, 28 countries were involved, all of which were at different stages of the IF process.

The IF has two main objectives: (i) to mainstream and integrate trade fully into national development plans; and (ii) to assist in the coordination and delivery of trade-related assistance provided by each of the core agencies in their specific field of competence and by other development partners (see also www.integratedframework.org). The IF was originally conceived to provide assistance in all areas related to supply development, as well as in the areas of standards, testing, quality and conformity. However, even its "revamped" form, the focus remains on customs and export marketing, with the result that the benefits accruing to the least developed countries have been relatively limited.

The Global Trust Fund and Doha Development Agenda Trust Fund

Both the Global Trust Fund and the Doha Development Agenda Trust Fund, established in 1999 and 2001 respectively, provide a vehicle through which WTO member states can make extra-budgetary contributions to ensure: (a) the participation of all developing member countries in WTO negotiations; and (b) financial and technical assistance for trade-related capacity building.

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\(^{50}\) Joint WTO/OECD Report on Trade-related Technical Assistance and Capacity Building, Geneva/Paris, December 2005
The Aid for Trade Initiative (AFT)

The WTO defined the scope and objectives of the AFT in December 2005 during the WTO Ministerial Conference in Hong Kong as:

“Aid for Trade should aim to help developing countries, particularly LDCs to build supply-side capacity and trade-related infrastructure that they need to assist them to implement and benefit from WTO agreements and more broadly expand their trade. It can be a valuable complement to the Doha Development Agenda, particularly on market access.”

This explicit recognition of a WTO interest in and responsibility for aid has raised many expectations; however, the recently designated Task Force on Aid for Trade, together with the WTO Director-General, still has to clarify the terms of the initiative in order to fulfil those expectations.

The AFT is also re-introducing components that though initially envisaged in the IF were somewhat neglected subsequently. The AFT initiative calls for further emphasis on providing TRTA in the field of strengthening/upgrading supply-side capacities and conformity assessment infrastructures: areas that correspond exactly to the areas of competence of UNIDO.

2.4.4 The trade capacity building initiative of UNIDO

UNIDO launched its trade capacity building initiative at the International Conference on Financing for Development in Monterrey, Mexico, in March 2002. It has also placed trade capacity building at the top of its corporate strategy and development agenda. UNIDO has thus realigned the focus of its technical assistance. In March 2006, it established a branch specifically dedicated to trade capacity building and has since entered into strategic partnerships with other key organizations.

The main goal of the UNIDO initiative is to promote export-oriented production, within the framework of poverty reduction. It focuses on enhancing supply capacities and securing for the developing countries an increase in both their manufactured exports and value-added, thus making for a greater share in global trade. The initiative provides developing countries with technical assistance for the upgrading of their institutions, support infrastructures and competitive productive capacities in order to: facilitate their integration into the world market, overcome both tariff and non-tariff barriers to trade and, ultimately, create a favourable trade environment.

The strategic approach of UNIDO

The reasons for the developing countries’ failure to benefit from the opportunities offered by the rapidly changing global markets are not related solely to tariffs and quotas; other factors also play a role. As the developing countries themselves recognise, they lack:

- Effective industrial productive capacity needed to ensure optimisation of production and product diversification
- Ability to comply with international standards needed to exploit the opportunities offered by the liberalised global trading system
- Equitable integration into the multilateral trading system

UNIDO responds to these problems through its three-pronged trade capacity building approach: the 3Cs:

- Developing competitive manufacturing capability;
- Developing and promoting conformity with market requirements;
- Enhancing connectivity to markets.

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52 In his recent book “Fair Trade for All”, Joseph Stiglitz refers to the UNIDO TCB initiative as presented in Monterrey in 2002.
Diagram 1: UNIDO trade capacity building

In its approach UNIDO focuses on upgrading standards, metrology, testing and quality infrastructure and services in relation to TBT and SPS, as well as on market analysis and development more closely related to supply-side capacity and access to export markets. However, complementary to those operational activities at the plant and institutional levels, UNIDO actively supports the developing countries in the creation of export consortia in different sectors, training national promoters of such consortia in both the public and private spheres and promoting a favourable institutional and regulatory environment for their development. In terms of regional focus, Africa is the main recipient in of UNIDO SMTQ/TCB projects: 34 projects over the period 2001-2005 (see Figure 4).

**Figure 4: UNIDO SMTQ projects, implemented, 2001-2005**

The strategic partnerships of UNIDO

UNIDO signed a cooperation agreement with the WTO at Cancun in 2003, under the terms of which assistance is provided to the developing countries in removing supply-side constraints, developing systems to prove conformity with market requirements and enabling better integration into the multilateral trading system. In addition to providing for close involvement in each other’s work, the partnership currently covers nine pilot countries and the joint WTO/UNIDO cotton initiative for African countries.

UNIDO actively pursues a policy of close operational partnership with other UN agencies such as UNCTAD, FAO and UNEP, as well as with technical organizations such as ISO, ILAC and IAF. UNIDO currently acts as secretariat to the Joint Committee on Coordination of Assistance to Developing Countries in Metrology, Accreditation and Standardization
(JCDCMAS). Established in 2002, the joint committee seeks to bring together all specialist organizations that operate at a global level and are active in promoting metrology, accreditation and standardization as a tool for sustainable economic development.

2.4.5 Principles governing assistance to trade capacity building

In an OECD report assessing assistance related to trade capacity building, success was said to hinge on four key principles53.

1. **Coordination of efforts**

The scope of successful TRTA/CB in developing countries is beyond the means of any single multilateral or bilateral donor. Consequently, donor coordination is essential. Required policy frameworks cannot function effectively if the institution and arrangements constituting it are assembled and/or strengthened independently. Furthermore, in order to save resources, increase effectiveness and respond to regional needs, efficient donor coordination is primordial.

2. **Comprehensive and integrated activities**

Comprehensive and integrated efforts in development cooperation are critical in achieving viable trade policy frameworks. This requires action in multiple areas and the inclusion of a wide range of key stakeholders in the design, implementation and evaluation of projects.

3. **Promote local ownership and participation**

Civil society and local business people are the key stakeholders of any TRTA/CB activities, since they are most acutely affected by trade capacity constraints and trade development challenges. Hence, local participation and consultation are defining features of an effective trade framework. This will ensure that the trade development process is locally owned, demand driven and will foster local ownership.

4. **Follow sustainable approaches**

Socio-economic sustainability should be the key objective of any TRTA/CB activity and will ensue, if processes are truly participatory and inclusive. None the less, explicit attention has to be paid to encourage sustainability when designing and implementing projects, for example through a greater use of national experts (ibid). Environmental sustainability, should, also be an integral element of project designing and implementation.

A fifth principle can be added to the list:

5. **Focus on supply-side constraints**

Developing countries, especially African countries, need assistance in:

a. Removing supply-side constraints in order to become more productive and competitive via upgrading programmes at the institutional and enterprise level.

b. Strengthening/establishing internationally credible standardization, metrology, testing and quality (SMTQ) frameworks and infrastructures in order to meet the multiplicity of technical requirements and standards set by the markets.

c. Enhancing their ability to analyse market trends and opportunities and so improve their capacity for formulating effective export strategies and approaches.

Consequently, the international development community, as well as multilateral and bi-lateral donors, should increase their allocations to the supply-side and SMTQ aspects of trade capacity building.

53 The following 4 paragraphs are taken directly from the 2001 OECD report: The DAC Guidelines, Strengthening Trade Capacity for Development; OECD, Paris (France).
2.4.6 In a broader setting

With the overall aim of securing greater developing country participation in global trade, TRTA/CB activities can be seen to be a step in the right direction that will ultimately lead to achieving two major MDGs: poverty reduction and a global partnership for development.

The significance of industry and trade and their close correlation to poverty alleviation are undisputed. The correlation between a global partnership for development and trade capacity building is equally significant as achievement of that partnership hinges on an open trading and financial system that is rules-based, predictable and non-discriminatory, while taking account of the special needs of the LDCs, including quota-free access for their exports. It can thus be seen that in its efforts to surmount the challenges that the developing countries face in their endeavours to produce a surplus of exportable goods, the UNIDO trade capacity building programme complements the targets set in the MDGs. In a world of interconnected threats and opportunities, it is in each country’s self-interest to address the challenges they face: something that can only be achieved through collective action at the national, regional and global levels.
2.5. Issues to be discussed

In view of the foregoing, the following concerns have been identified as the main issues to be addressed:

- What are the main reasons for the failure of developing countries in general and African countries in particular to benefit from the opportunities offered by the global market?

- How can developing countries, in general, and African countries, in particular, gain appreciable benefits in terms of economic growth and wealth creation from greater market penetration and fuller participation in global trade?

- What are the supply-side constraints hindering the African countries’ trade performance?

- How are the productive sectors with high export potential best identified and assessed?

- How can the productive sectors selected be assisted to enhance their competitiveness and increase their access to export markets?

- What is the critical mass of support, institutional and otherwise, that African industries and enterprises require to upgrade and improve competitiveness?

- What is the critical mass of infrastructural/institutional support required at the national level?

- What is the critical mass of infrastructural/institutional support needed at the regional level to foster exports and reduce the inflow and production of hazardous products that pose a high risk to African consumers?

- Can developing countries, in general, and LDCs, in particular, afford to invest in that quality infrastructure?

- How can the provision of cost-effective, sustained and internationally recognized services in testing, conformity assessment and metrology be enhanced through cooperation at the national, regional and international level?

- How can the constraints that SMEs encounter in their endeavours to secure entry into foreign markets be best overcome?

- Can trade capacity targets be measured in terms of the indicators used in the MDGs?
ANNEXES

Annex 1: Productive capacity building in selected subsectors

Annex 1.1: Building productive capacities in cotton, textiles and garment value chains: the joint WTO-UNIDO cotton initiative

Cotton is an important cash crop to a number of African countries at the micro-economic (rural livelihood) as well as at the macro-economic (GDP contribution) level. In most African countries, cotton is typically a smallholder crop, which is grown in rain-fed land and with minimal use of purchased inputs such as chemicals or fertilisers. It is estimated that approximately 15-20 million people directly and indirectly depend on cotton in African cotton-producing countries. There is great potential for increasing the contribution the sector makes to employment, economic growth and poverty alleviation in the region through greater cotton transformation (currently less than 5%) and the development of the productive capacities of the cotton, textile and garment (CTG) sector by increasing value-added and improving quality. It is particularly true for West and Central African states, where cotton plays a significant role in the economies. With 2 to 3 million producers, the cotton sector’s contribution to the GDP of those countries ranges from 5 to 9%. In Benin, Burkina Faso and Chad, it accounts for approximately 35-40% of total export earnings.

Despite competitive skilled labour costs, the African cotton and textile sector faces key constraints at the international, regional and national levels, which include, among others, trade-distorting subsidies in developed countries, high physical infrastructure costs, lack of necessary modern production capabilities, low cotton transformation ratio (less than 5% compared to 100% in Turkey, Pakistan or China), low product quality that does not meet international standards for exports, lack of internationally accredited standardisation bodies and laboratories as well as a weak capacity to attract domestic and foreign investments. Consequently and to address these problems, UNIDO, in cooperation with the WTO, developed a comprehensive programme that focuses on upgrading and strengthening the productive capacities (supply-side) and conformity assessment requirements of the CTG sector in order to enable the main cotton and textile actors to integrate and benefit from the global trading system thanks to a more efficient CTG value chain.

The key beneficiaries of the first phase of the programme are cotton producers in the eleven largest sub-Saharan countries: the West African States of Benin, Burkina Faso, Côte D’Ivoire, Guinea-Bissau, Mali, Niger, Nigeria, Senegal and Togo as well as the Central African States of Cameroon and Chad. At the regional and national level, private sector infrastructure along with the cotton farmers associations, investment or export promotion structures and other institutional capacities will be the main beneficiaries of the present programme. The key stakeholders of the programme are:

- The regional and national government authorities
- Representatives of the private sector and of cotton farmers
- Private and public cotton textile and garment operators
- Regional and national support institutions, including:
  - Investment promotion offices
  - Quality, standardization and metrology infrastructure;
  - Technology centres
  - Trade associations, information structures and networks
  - Consumers of textiles and garments

The joint WTO-UNIDO Cotton Initiative proposal is considered a matter of high priority by the recipient countries and the international community. The proposal is, also, in line with priorities expressed by the international community in the Doha Declaration issued during the Fourth WTO Conference, the Millennium Development Goals as well as with the New EU Action Plan on Agricultural Commodities, Dependence and Poverty and its specific actions for cotton. The proposal, which supports the development of the CTG value chain, seeks to enhance the cotton sector’s contribution to the gross domestic product, employment and exports in the targeted states. As a result, it aims to contribute to poverty alleviation in the region.

One of the final objectives being to develop supply side and export capacities of the CTG actors (farmers, cotton-transforming, textile and garment enterprises) in the participating countries, a concerted set of support activities will be provided for the development of the CTG production chains through three main modules:

- Module 1: Harmonizing sectoral strategy and policies and upgrading and developing supply and productive capacities in the CTG Sector
- Module 2: Facilitating the production of CTG goods that conform with the technical regulations and standards requirements of the global market;
- Module 3: Integrating the CTG actors in Africa into the multi-lateral trading system

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Based on the experience of UNIDO, the major impacts from the programme are expected to be:

- Direct and indirect benefits to the 15 million people depending on the cotton industry chain;
- Creation of 10,000 direct jobs in the cotton-textile-garment enterprises;
- Technical and business training provided to 5000 professionals and technicians;
- Increased supply-side productivity (ginneries and textile enterprises) by 20 to 40% in the short term;
- Increase in export revenue by some 20% to 40% in the medium term;
- Increase in the level of cotton transformation from current 5% to an average of 25% by 2015;
- Increase in investments in the cotton processing industries by 15% to 20%;
- Increase in value of cotton by some 5% in the short term through the improvement of cotton classification, quality and information;
- Strong worldwide partnerships with other institutions and enterprises;
- Replication of the project in other cotton-producing countries, especially in South and East Africa.

Since its formulation in 2005, the joint WTO-UNIDO Cotton Initiative proposal has been presented on a number of occasions such as the trade-capacity building side-event during the 11th UNIDO General Conference and a side-event organised during the WTO Ministerial in Hong Kong in December 2005. Moreover, it features among the international cotton initiatives that are officially recognized by the WTO. With its multi-disciplinary approach, the WTO-UNIDO Cotton Initiative, which will last 36 months and cost €21 million, requires collective action by specialised UN agencies such as UNIDO, WTO, UNCTAD, ITC, FAO and UNEP as well as international specialized agencies such as ICAC (International Cotton Advisory Committee), ILAC, ISO, ACA (African Cotton Association) and CDE (Centre for Development of Enterprises). Contacts have, already, been established with most of these organisations and technical discussions have to be finalised with several of them to initiate cooperation. On the donors’ side, the EU, African Development Bank, Islamic Development Bank, CFC and France have expressed their strong support for the initiative and talks are taking place on mobilising and securing the funds needed to implement the proposal.
Annex 1.2: Building productive capacity in the fruit and vegetable industry *

1. Value chain, linkages and the issue of agriculture/agro-industry

For various reasons, which have to do with policy and strategy, infrastructure, technology and know-how and business management and marketing, the food industry and agriculture in African countries have limited integration and linkages. The food industry has been encountering difficulties with regard to the regular supply of raw materials with an adequate quality and in adequate quantity, while the bulk of agricultural production, for want of major outlets, has remained at subsistence levels: low yields, heavy post-harvest losses and hazardous and poor quality products. This is the case with fruits and vegetables, which are among the most nutritious and healthy foods. Actual production across Africa is high, especially in smallholder farming systems and the potential exists for expanding production given favourable weather conditions and market demands. This has already occurred in some situations, e.g., close to major urban centres, in areas linked to fresh produce export-oriented supply chains and areas supplying raw material for processing facilities.

Fruit/vegetable are usually perishable, especially in humid tropical conditions. Post-harvest losses are high (up to 40% et even more for some products). The scale of these losses represents an opportunity for the use of post-harvest technologies and for better integration of production and processing operations, targeting increasing small-market niches (such organic and natural products). The fruit/vegetable sub-sector offers many opportunities for value-added products; both as regards fresh produce (through grading, quality control, packaging and marketing arrangements) as well as processed foods (juices, sauces, jams, canned, frozen goods and dried products) and some non-food products (flavours and aromas, starch, soaps). These above opportunities provide large scope for private sector driven rural industrialization and employment generation.

However, owing to poor linkages with market outlets (be they industries or consumer markets), weak infrastructure, poor transportation and the perishable nature of the produce, appreciable quantities are wasted. Only a small quantity is exported (off-season) in a fresh state to various Northern markets (green beans, citrus, melons, mango, pineapple) and/or sold on the domestic market. According to figures collected from various assessments in Africa, post-harvest losses in fruits and vegetables can be as much as 50% of total production (mango, pine-apple, tomato, onions).

A range of fruit and vegetable processing technologies exist, both in developed countries (larger scale, capital-intensive) and in other regions (smaller scale, more labour-intensive especially in Asia) that can be adapted to African conditions through pilot level operations. The fruit/vegetable sub-sector represents a major opportunity for contributing to MDG 8 (development of global partnerships) based on the high level of private sector interest and involvement, the priority given to the sub-sector by national governments, and the recognition by many NGOs and community groups of its potential for poverty alleviation. While some such initiatives have been already launched in a number of African countries by UNIDO and other technical assistance organizations, they need to be scaled up and expanded to other countries.

2. Potential and constraints facing the fruit/vegetable sub-sector

The fruit/vegetable sub-sector has a number of key strengths, especially related to supportive government policies both for agriculture and industry, to the current and future interest and involvement of the private sector, and to the production potential that exists for fruits and vegetables across Africa (with a range of climates and altitudes permitting production of tropical and temperate crops). Weaknesses are the high level of post-harvest losses, compounded by poor use of technology and a deficient rural infrastructure that makes transport and communications difficult, weak or non-existent support services and poorly integrated market or value chains (except for those already operating for certain high-value export markets) and support services (extension, training, technical assistance) that are usually deficient in quality and partial in coverage. Opportunities exist for the fruit/vegetable sub-sector to develop, especially around the growth markets that are developing within national economies (in the wake of income increases in urban areas, expansion of supermarkets, etc.), across African regions (aided by the harmonization of standards and improved transport links) and higher value international markets, especially in the EU but also in the Middle East.

However, major threats to this scenario also exist. Firstly, the regulations governing the importation and distribution of food products into the EU and other high value markets are increasingly stringent and tend to change with high frequency. This is due to ever-heightened food safety and quality concerns on the part of consumers. In response, supply chains are becoming more integrated (or coordinated) often with control passing to the retail chain involved. This trend threatens to marginalize the smallholder producer since it is more complicated to implement new quality assurance and traceability protocols in many small production units than across a few larger scale operations. Realizing the potential that smallholders have for producing, processing and marketing added-value fruit/vegetable products will increasingly require coordinated action (including the necessary organizational arrangements, linkages with market outlets, infrastructure and equipment, financial and non-financial support services) by a range of stakeholders. In addition, the fruit/vegetable sub-sector

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generally lacks the institutional structures that are necessary for all the stakeholders to design and implement strategies for its continued development.

Over the past few years increasing attention has been paid to the rapid expansion of supermarkets in Africa. Supermarket chains in a number of African countries already commercialize increased volume of fruits and vegetables that are currently exported, yet little attention has been paid to the development of market linkages between smallholder producers and these major retailers. The fast developing trend towards more coordinated value chains along with the quality and supply continuity requirements these entail in domestic markets represents a serious threat to smallholder producers/entrepreneurs in the short and medium term. Fruits/vegetables are best consumed fresh; however, processing is required for the better preservation and supply of wholesome, safe, nutritious and acceptable food to consumer throughout the year. Provided it is competitive, food processing can produce good substitutes for various imported products. Fruit/vegetable processing can be a major outlet and lead to an increase in production. Given the competitive constraints associated with economies of scale, the fruit/vegetable industries that have performed relatively well in Africa are those that rely exclusively (or mostly) on imported raw materials. The juice and beverage industry using imported concentrates is a good example.

3. The role of vocational training

In some African countries, a number of donor-funded projects are being undertaken in the fruits and vegetable sub-sector. These tend to be focused on export markets, and often provide support to the development of market-linkages for high-value produce with importers in the EU or elsewhere. An integrated approach is needed to add value to these efforts to:

- Enhance food chain organization and the provision of support services to the sub-sector, through the establishment of centres of vocational excellence at the national and/or regional levels;
- Identify and evaluate options for better intra- and inter value chain organization and closer links between actors so as to enhance local innovation and yield greater and more equitably distributed benefits - including gender and other social considerations - though the fruit and vegetable value chain;
- Design and implement new or enhanced demand-driven and sustainable business development and capacity building services, including technological upgrading and linkages to market outlets;
- Ensure a good understanding of the process and create a common vision among the various stakeholders at both the country and regional levels.

To promote the uptake by producers and agro-enterprises of innovative technologies, there is a need to facilitate access to and provide the technical assistance in the form of those technologies that can improve food security and participate efficiently in a range of markets from local to international. This will be the role of the centres of vocational excellence. They will contribute to:

- Conducting information and technology needs assessments that will permit the better use of appropriate technologies, improve the marketability of rural produce and enhance the utilization of wastes and by-products;
- Developing and promoting the adoption of technologies that can enhance food security and capitalize on market opportunities, improve competitiveness, heighten environmental sustainability and adhere to food quality and safety standards through collaborative partnerships;
- Adapting and improving the use of information and decision support tools to introduce or improve post-harvest techniques and technologies and train end-users in the application of those tools. This includes methods for improving the capabilities of small-scale processors in product design, development and innovation;
- Establishing and fostering a network for communication, information exchange and partnership across the various professionals linked to the sub-sector;
- Developing sustainable results-based training and technical assistance;
- Synthesising and analysing pilot projects and developing a model for effective and sustainable food value-chain development applicable to other sub-sectors.

The centres of excellence will be developed by building on the existing resources of key national institutions and operators involved in the fruit/vegetable sub-sector including production, post-harvest handling and storage, marketing, processing, research and development. The aim is to establish focal point for expertise, information and support services, including technical assistance and training. The centres will promote the introduction of new technologies in the sector through the creation of pilot processing operations, using innovative processing technologies and established vertical (upstream-production/farmers- and downstream-market outlets) and horizontal linkages. The pilot operations would function as a pilot mini value chain.

It is of the utmost importance that private sector organizations be associated with these activities in order to ensure sustainability upon completion of the pilot phase.
Annex 1.3: Building productive capacity in the cassava value chain *

1. Introduction

Cassava (Manihot esculenta Crantz) is a root crop cultivated and consumed as a staple in many regions of the developing world. Africa produced 101.6 million metric tons of cassava in 2003, making it the most important root crop (FAOSTAT data, 2004) and a major source of dietary calories. Cassava is available round the year, tolerates conditions of extreme ecological stress and impoverished soils and is suitable to existing farming and food systems. In West Africa, cassava is produced in Nigeria, Ghana, Cameroon, Sierra Leone, Benin, Togo, Côte d’Ivoire. It is also produced in Central Africa mainly in DRC, Rwanda, Burundi, in East Africa in Uganda and Tanzania and in South Africa in Mozambique and Malawi. Nigeria is the world’s largest producer of cassava.

Cassava is processed into various food products; it also has many industrial uses in the production of ethanol, starch, flour and feed. The crop therefore has great potential not only as a food security crop but also as a cash crop (a raw material base for various industries). Cassava developed and cultivated as an industrial raw material can contribute significantly to poverty reduction and to the economic development of the cassava-producing countries.

2. Promoting selected value chains together with the African private sector

Cassava is a dynamic and versatile crop with multiple uses as food and also as an industrial raw material. The regional demand in Africa for cassava and cassava products such as starch, high quality cassava flour, ethanol and animal feed is high; it is currently being met by imports from Thailand and elsewhere. The potential of cassava to contribute to economic development in terms of employment generation and rural development in Africa remains unexploited as cassava production continues to be a subsistence farming activity in nature. This has affected the success of past efforts to make cassava a major source of industrial raw material for ethanol, starch and animal feed as the current production system is unable to meet industrial demands in terms of quality and volume. Most processing is done at the level of micro and small-scale enterprises with no linkages, resulting in an inability to supply the large volumes demanded by the market. In addition, inefficient technologies used in the processing of both food and industrial products result in non-competitive products in terms of pricing and quality. It also poses a real threat of environmental pollution, as many of the small-scale industries have not adopted cleaner production processes.

3. Importance of cassava to improving productive capacity

As already mentioned, cassava is a dynamic and versatile crop. Promoting the development of the cassava sector is more likely to spur development not only along the value chain but in other sectors as well, such as packaging, supply of inputs, fertilizers and pesticides. A vibrant cassava processing industry will create demand for more roots that would increase the utilization of inputs and research to increase yields at the farm level. Demand for packaging material is also ultimately bound to increase as products are diversified. By-product utilization would generate more revenue and lower production costs, thus adding to the cassava industry’s competitiveness.

Being 80% water, cassava demands that primary processing be located as close to the producing areas as possible to reduce transportation costs. Consequently, cassava could create the much needed non-farm rural employment since more people would be engaged in primary processing activities and in the provision of requisite inputs - a good remedy for rural urban migration. In addition, increased processing at the rural level would ultimately lead to the development of rural infrastructure including the provision of utilities. Furthermore, the increase in consumer demand for high quality products means that the development of the cassava sector would demand parallel development of crosscutting issues such as institutional support services relating to quality assurance and conformity to standards. The sustainable development of food safety and quality in the region has in the past been hampered by the low demand for services from an infant food industry. Policy considerations relating to cassava production that address such issues as land tenure and investment in the agro-sector also affect other agro-sectors. Once resolved, they would have a positive impact on the other agro-based sectors as well.

The dual cassava production system that has been successful in Brazil and Columbia is most likely to evolve in the development of the cassava sector in Africa. For sustainability and diversification of operation, the “low input - low output” smallholder production, processing, and marketing system would remain, followed by the development of a medium- to large-scale integrated production, processing, and marketing system based on “high input - high output mechanized” cultivation and using highly efficient processing technologies. Overall, the private sector (governed by market trends and demand) would be the main player in guiding the development of the cassava sector possibly through the promotion of vertical and horizontal integration. Governments would be primarily involved in the provision of an enabling environment in terms of infrastructure (energy, electricity, water, roads, communications) and enactment of policies supporting investment in, and the development of, a

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viable competitive cassava industry. The research institutions as support institutions would supply improved varieties of cassava stems for planting as well as promote appropriate technologies.

4. Potential UNIDO interventions in the African private sector

The key strengths of the cassava sector in Africa are: the huge domestic market for cassava products; a climate conducive to the production of raw material (the cassava root); and the availability of affordable labour in rural areas. With a readily available market for cassava products, the region needs to supply on a competitive basis the products demanded by the market. To achieve this, the constraints that have contributed to the low utilization of cassava have to be addressed: the high production and transaction costs; and supply-side rigidities. These include policies that are not conducive to investment in the agro sector, poor infrastructure, non-competitive raw material production, the limited value-added and inadequate marketing.

The region needs to be supported in the development of an enabling environment for cassava production through the provision of adequate infrastructure and the introduction of policies favouring increased cassava production and utilization. Support is also required in the transfer of technology to improve operational efficiency and product quality at the enterprise level. The technology transferred must also incorporate the principles of cleaner production and waste minimization, as well as food safety and quality assurance so as to ensure market access. Business management and entrepreneurship development support will also be key to promoting small-scale industries, especially those at the farm-gate level. The importance of investment promotion, especially joint ventures with local investors, cannot be overemphasised.
Annex 1.4: Building productive capacity in the leather and leather products industry

1. The importance of the leather and leather products supply chain

The African leather industry is an important strategic sector for the economic and industrial development of many African countries. It can draw on an abundant renewable resource base given the large number of cows, sheep and goats in Africa. The industry is labour-intensive and has the potential of being a major source of employment along the whole supply chain. Given the structural developments in the industry, its technology and enterprise management envisaged for the period up to 2010, it is expected that the international leather products industry will continue to site its productive capacities in those locations offering the most favourable labour and other conditions. The nature of the production processes in the industry is such that the industrialized footwear-producing countries subcontract to countries with low-cost, high-labour productivity. In this context, it is clear that realisation of the potential offered by the African leather industry would yield significant economic gains to the region. None the less, major obstacles will have to be overcome, if that potential is to be realised. The main problem lies in the collection and processing of the abundant supply of hides and skins.

The leather supply chain begins with a raw material that is a by-product of animal husbandry. It then goes through four primary stages: three processing stages and finally the marketing stage.

Stage 1: Recovery of hides and skins from slaughtered animals on farms and in slaughterhouses;
Stage 2: Conversion of the hides and skins into leather in tanneries: a process normally requiring substantial investment in equipment;
Stage 3: Manufacture of leather products often carried out in small labour-intensive workshops (with little need for substantial investment in equipment) or in larger capital-intensive factories;
Stage 4: Domestic and export marketing of intermediates and end-products at different stages of the supply chain. This is the key to success in the modern leather products business. At the global level, it is tightly controlled by international marketing agents who have the market knowledge and an extensive network of sales channels allowing them to manage the complex supply chains, contract production, provide finance and serve their customers on time.

Each of these stages requires inputs, policies and support systems, if the chain as a whole is to function effectively.

- Inputs include equipment, chemicals, and components such as laces and buckles, technology, design, research and development, information and information technology, human resources development, technical and administrative support institutions, as well as financing.

- Policies must be formulated, and strategies developed pertaining to:
  (a) Recovery of hides and skins: policies on animal husbandry, disease control, the commercial stock breeding, a quality-effective pricing systems, slaughtering regulations and environmental protection directives;
  (b) Tanning and manufacturing: policies on credit for and investment in plant modernization and export promotion, environmental regulations and reward incentives; and
  (c) Marketing: policies on market development, sub-regional integration and business support centres (WTO, NEPAD), as well as import terms and conditions.

- Support systems for investment and innovation are required at each of the processing stages with respect to related services, improved industrial services, physical and telecommunications infrastructure and linkages between all stages of the chain. These systems must be incorporated in the policies with respect to such mechanisms as subcontracting, joint ventures, promotion of FDI, e-trade and benchmarking.

The leather supply chain with all the inputs, policies and support systems that it requires is clearly a highly complex system, in which problems, constraints and the search for solutions are closely interrelated.

2. Major constraints

A range of factors have been identified that affect the competitiveness and export development of the leather supply chain in Africa.

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* Prepared by Aurelia Calabro in Bellamoli, UNIDO, Vienna (Austria).
The quality of hides and skins caused by: (a) lack of incentives to producers to improve quality; (b) the cultural patterns and lifestyle of traditional livestock producers; (c) price setting that does not encourage quality; (d) lack of grading of raw hides and skins.

Poor and deteriorating physical infrastructure and expensive services (especially roads, electricity supply and telecommunications).

An inadequate level of technological development throughout the leather supply chain extending from the selection of stock for rearing through to the production of finished leather products.

Low productivity and often poor workmanship (necessitating the provision of training in modern processes and technologies, as well as enterprise and quality management).

Lack of working capital or low-interest capital since most commercial banks in the region only offer short-term loans at very high interest rates.

Lack of effective environmental control mechanisms to monitor compliance with existing environment protection laws.

Reduced inflow of FDI owing to: (a) low degree of transparency in business operations; (b) the level of marginal corporate taxes; (c) the size of the market; (d) poor infrastructure; and (e) low productivity.

Lack of trade and marketing information, expertise and support:

- Poor intelligence and information systems on trade and marketing, resulting in limited availability of trade information: a serious constraint on export growth;
- A lack of training and experience in marketing, trade negotiations, negotiating partnerships within the region and without, and trade facilitation, compounded by weak linkages between export promotion institutions;
- A product-oriented (rather than a market-oriented approach) among leather and leather products enterprises, which often fail to give due consideration to consumer preferences;
- Under-utilization of technologies such as the Internet in exploring markets or locating new technological developments.
- Trade liberalization has been primarily responsible for the loss of domestic market shares. It has led to second-hand shoes being brought in from Europe and cheap quality products from Asia that meet the demand from consumers with limited buying power, as well as to the failure of the African companies to respond appropriately to this challenge.

3. Requisite support at the institutional and enterprise levels

The development of the African supply chain calls for a number of priority steps:

- The design of comprehensive strategies and related policies;
- The application of a large number of interrelated activities to improve governance, information flow, the modernization of services to industry and infrastructure, as well as the introduction of updated technologies and investments throughout the supply chain;
- The modernization of trade mechanisms and institutions, as well as the establishment of training institutions to improve productivity throughout the chain;
- The improvement of the local banking system’s capacity to deal with leather as a commodity, as well as the establishment of a structured finance system;
- The removal of barriers to FDI and inter-regional trade;
- Inter-regional cooperation to improve market access.

Government and the private sector should undertake these actions jointly with the assistance of international organizations specialized in different aspects of the supply chain. Mechanisms such as public-private partnerships will promote consultation and dialogue with participants from the public sector at both the national and local levels, and with private sector representatives from business associations and federations, chambers of industry and commerce, trade unions, financial institutions, and research and university institutions. International organizations such as UNIDO, UNDP, FAO, ITC, CFC, the World Bank, and the African Development Bank should participate actively, as should NEPAD with its capacity to accelerate the solution of problems related to regional infrastructure and the promotion of intra-regional trade. UNIDO has a number of suggestions relating to the development of policies, the improvement of animal resources, hides and skins, the tanning and manufacture of leather products, training and technical services, as well as the marketing of hides and skins, intermediate and finished products and information technology.
Annex 2: Addressing selected crosscutting issues

Annex 2.1: Importance of technology and enterprise upgrading in building productive capacity

Participation in the global process of globalization calls for the capacity to address properly technology development and to embed know-how and competencies in the specific sectors where national competitive advantages rest. The technological base of a large number of African countries is very weak and thin, if not non-existent. A focused technological incentive should provide the initial impetus needed to place these economies on a speedier track to development. Lack of development means lack of financial resources which, in turn, are a prerequisite for successful technological development and acquisition of know-how.

In sub-Saharan Africa, the number of people living in poverty has grown over the past 20 years\(^54\). The paramount needs of Africa are linked to the lack of appropriate technologies and related industrial development, especially in such crucial primary areas as food security, safe water, energy supply and provision of shelter. The UN Declaration and the Programme of Action for the LDCs for the decade 2001-2010 highlighted the critical importance of technology transfer, access and diffusion. The Programme of Action for the LDCs clearly indicates that those countries’ capacity to accelerate growth and sustainable development is impeded by structural and supply side constraints, such as a low level of technological capacity. In particular, Commitment 4 of the Programme calls for the building of productive capacities to make globalization also work for the LDCs. Under that commitment the following themes are addressed:

- Physical infrastructure: including the provision of shelter, energy and water;
- Technology: promoting appropriate and sustainable technology transfer capabilities, creating horizontal and vertical linkages and fostering the diffusion of technologies;
- Rural development and food security: emphasizing the critical need to improve access to food that must be part of the broader sustainable development framework. In this regard, efforts must be made to boost food industry productivity;
- Energy: enhancing access to and capacities in energy production as an important factor for sustainable development and the eradication of poverty, with particular emphasis on the promotion of renewable energy and the development of clean energy technologies;
- Against the above backdrop the role of technology cannot be over emphasized as a viable means of ensuring economic growth and equitable development in all African countries. Food security, safe water, energy supply and shelter provision are key targets reflected in both the MDGs and the NEPAD industrialization strategy. The world’s most underprivileged countries are caught in the poverty trap because they are too poor to accumulate funds and invest at the rate necessary to keep ahead of the adverse trends associated with population growth, environmental degradation, disease, brain drain and capital flight.

1. Constraints and technological challenges for small and medium enterprises (SMEs)

An integrated approach is needed in order to support African countries, in particular the African LDCs, in bridging the technology divide and so achieve the targets set in the MDGs, most specifically those related to:

- Eradicating extreme poverty and hunger
- Ensuring environmental sustainability
- Developing a global partnership for development

The UNIDO Technology Partnership Programme for Poverty Alleviation in Africa aims to enhance the capacity of Africa to address properly issues of technology development and adaptation, embedding know-how and competences in those basic sectors where national competitive advantages rest. The appropriate technologies dealt with will address the basic needs of the African countries, such as: food security (food processing and food packaging), energy provision at the community level, the provision of building materials for housing and shelter, safe water and agricultural equipment (forging and casting processes, electric cables). Developing and strengthening these capacities at the level of local industry will yield a number of major benefits: job creation, economic development, technological competence, investment stimulus, and overall poverty reduction with a corresponding enhancement of the quality of life.

The direct beneficiaries of this initiative will be industries in the private sector operating in the key areas identified. The benefits will be extended to the sectoral productive chains related to the above-mentioned sectors and through them to local society in response to basic needs. The target clients of this initiative are private sector entrepreneurs to be reached through business associations, federations and enterprises, as well as the public sector to be reached through institutions (national

\(^{54}\) In Africa, people living in extreme poverty ($1 a day or less) rose from 217 million in 1990 to 290 million in 2000.

Prepared by Emilio Vento and Jean-Brice Blavignac, UNIDO, Vienna (Austria).
innovation system) and local authorities (policy and strategies). Each of them will assume a specific role in the process of diagnostic and market assessment, technology transfer, absorption, adoption and dissemination in keeping with their mandate and vested authority.

The aim of the overall programme is to make available through the good offices of UNIDO (sourcing, assessment, capacity building, partnerships and technical assistance projects) a pool of appropriate technologies. UNIDO will identify the technologies to be broadly disseminated and absorbed. The initial pool of technologies will comprise at least 100 appropriate technologies, it being expected that with the involvement of national authorities and global players, the pool will be continuously updated and enlarged. The technologies will be made available and adopted through the implementation of sector-specific technical assistance demonstration projects aiming at strengthening core productive chains, with the involvement of local entrepreneurs, international partners and national institutions.

Industrial application will be the main factor governing the selection of the technical assistance initiatives to be launched. A pragmatic business approach will be adopted to ensure sustainability and continuity of those technical assistance activities. At the sectoral and cluster levels every effort will be made to identify the most suitable entrepreneurial partners experienced in technology transfer, adaptation and absorption. The business perspective will be developed in close consultation with international technology experts drawing on the support of local institutional providers of technology services.

The immediate objectives of this initiative will be:

- To identify and prioritize national technology needs in term of industrial sector development, expertise, capacity building and feasibility;
- To identify and secure a pool of supporting appropriate technologies;
- To identify potential public and private partners suited to facilitating the technology transfer and adoption process;
- To secure the necessary funding for broad-scale inputs into the development agenda of the African countries.

The expected outputs of the proposed initiative will be the implementation at the national level of specific technical assistance projects formulated in response to national priorities and demands brought forward by target beneficiaries. This will be done in close cooperation with local public and private sector partners. The technical assistance interventions will be designed in and equitably distributed across the African countries participating in the programme, due account taken of specific core competences, priority needs and funds availability.

2. Towards a regional technology diffusion programme

Sectoral interventions at country level will permit the customization of specific technologies in keeping with specific country priorities. It will be responsibility of UNIDO to bring about broad interactions at the regional level in relation to sharing and learning from similar experiences and applications, solving problems, developing skills and building institutions in support of innovation.

Identifying actors, institutions, investors and markets and establishing the related networks will be an additional key function of UNIDO that will contribute to optimising the use of available resources, leverage crosscutting expertise and experiences, capitalize on monitoring information and data exchange, as well as the establishment of regional institutional competences.

By centrally coordinating the programme, it will be possible to build up an interactive and on-line source of information on institutional technology partners, repositories of knowledge, learning services, skills upgrading, potential partners and funding opportunities, all of which are elements of paramount importance to a sustainable approach to technology diffusion and adaptation.

All technology initiatives implemented at country level will be closely monitored and continuously assessed in order to yield the benefits of mutual learning and improvement at the sub-regional, regional, sectoral, sub-sectoral and technology-specific levels. In that respect attention will focus on the advantages of using domestic technology and entering into regional cooperation or even more broadly South-South cooperation.

Particular attention will be paid to mechanisms for furthering inter-country cooperation and joint activities related to technology upgrading and technology innovation. They are essential to building up long-standing regional efforts to sustain industrial development through enhanced productivity, stronger core competencies and greater involvement of private sector skills and investment. Whenever possible, civil society organizations will be co-opted into process, especially in those instances where basic needs being addressed at the community level or basic local market demands are involved.
Annex 2.2: Towards a regional programme for investment in sub-Saharan Africa

1. Foreign direct investment and its importance to Africa

FDI is widely accepted as an important element contributing to growth in developing countries. Without FDI inflows many developing countries could not expect to achieve basic development targets, such as increasing growth through productivity and alleviating poverty. Hence, governments compete fiercely with each other in their endeavour to attract transnational corporations to their countries as suitable locations for FDI projects. However, developing countries and their policymakers face considerable challenges where FDI promotion is concerned. Different forms of FDI have different impacts in such areas as the labour market, (and the various segments thereof), productivity, trade, domestic investment, education and technological innovation.

For example, labour-intensive FDI acts as a generator of employment. Though important in terms of poverty reduction, it often only requires unskilled workers and has few other spill-over effects, such as upgrading a country’s level of technology. Another example frequently cited is the potential of selected forms of FDI to “crowd out” domestic enterprises and their investment. For African countries and LDCs, the promotion of FDI inflows is a key element in the response to their need for technological development and economic growth. Other forms of technology acquisition through commercial channels would require a significant technology base and absorptive capacity from the very outset; this, however, is insufficient or simply does not exist in some countries. Many forms of FDI only call for basic skills in the host country, yet they bring capital, technology, management techniques and market links.

2. Major constraints

Many of the economic development indicators for sub-Saharan Africa, such as income per capita or its share in world industrial output manufacturing value-added per capita, are on the decline. Others, such as Africa’s share in global exports and FDI inward stocks, remain stable, albeit at very low levels. On the other hand, data on the global balance of trade reveal that the region has seen a constant rise in new foreign investment inflows that amounted to $18 billion in 2004. Looking at the FDI inflow data more closely, however, reveals that the bulk of the inflow is directed towards natural-resource exploitation in but a few resource-rich African economies. Other countries (and other sectors within the resource rich-countries) do not feature much in the investment considerations of transnational corporations.

3. Supporting the private sector in Africa

The UNIDO-Africa Investment Promotion Agency Network was established in 2001 as a platform to develop and formulate strategies and activities that correspond to the limited resources (human and financial) available in African countries for investment promotion. A bi-annual survey of foreign investors in was introduced; it started compiling plant-level data as a basis for the formulation of appropriate strategies. The surveys for 2001 and 2003 that covered over 800 foreign-owned companies in ten countries (2003) attempted to obtain an analytical overview of FDI in sub-Saharan Africa; it focused on basic motivations, operational characteristics, perceptions and future plans. The findings identified sectors that are growing, countries, investment promotion agencies (IPAs) that are outperforming and the amounts of new investment that foreign investors are prepared to make. Based on those findings and following a series of (round table) discussions, conclusions and recommendations were drafted; they included the need to develop after-care service capacities and have the IPAs adopt a more coordinated approach to regional investment promotion. The 2005 survey presented at AfrIPANet (African Investment Promotion Agency Network) III that offered an analytical comparison of different categories of foreign investors in terms of their operational characteristics and impact on local economies.

The survey conducted over the period May-November 2005 covered 15 countries in sub-Saharan Africa. More than 3,000 foreign investors were approached and over 1,200 valid responses were...
received\(^59\). This year the study involves more in-depth analysis of certain issues that came to light in the 2003 survey. In particular, it provides an accurate profile of the different types of investors and looks at the variations in characteristics both between groups and within groups. The analysis also takes a deeper look at the impact that different kinds of FDI have on the national economy. The impacts looked at are: technology and know-how dissemination, skills development, backward and forward local linkages, market access and integration into global value chains, increased local manufacturing value-added. The findings and conclusions of the survey lead to a number of specific recommendations for African IPAs and the technical assistance requirements to support them in this endeavour; taken together they represent a broad based regional programme for UNIDO to implement. Issues such as the emerging importance of South-South FDI and the increasing role of African IPAs in integrating FDI with domestic investment activities form the core of that regional programme.

The third bi-annual meeting of AfrIPANet took place 12-14 June 2006 in Johannesburg. Participants included the chief executives of 17 national investment promotion agencies from sub-Saharan Africa, CEOs of a number of small and large enterprises with investments in the region, renowned academic researchers on international business and investment, as well as financial institutions. Panel discussions looked at such issues as developing backward supply chain linkages to attract and benefit from FDI, cooperative regional investment promotion strategies, financing alternatives for domestic investment facilitation and after-care service development to increase the rate of reinvestment by existing foreign affiliates.

On the basis of the findings in the survey and the recommendations emerging from the panel discussions, a comprehensive regional programme has been drawn up. It comprises a comprehensive set of actions at both the regional and country levels addressing the bottlenecks to industrial investment in a comprehensive regional programme. This is a programme developed jointly by the region’s principal investment advisors; it is designed to be extremely efficient in terms of implementation. The programme, an amalgamation of the principle of investment promotion and industrial development, is multi-disciplinary and addresses the needs of both local investors and their potential foreign partners.

The comprehensive regional investment programme will be presented to the Conference of African Ministers of Industry whose support for fund-raising among donors will be sought.

\(^{59}\) The questionnaire used in the survey is accessible under http://www.unido.org/doc/42505.