

**CHALLENGES AND OPPORTUNITIES FOR
FURTHER IMPROVING THE TRANSIT SYSTEMS
AND ECONOMIC DEVELOPMENT OF
LANDLOCKED AND TRANSIT
DEVELOPING COUNTRIES**



UNITED NATIONS
New York and Geneva, 2003

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UNCTAD/LDC/2003/8

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ABBREVIATIONS

ACIS	Advance Cargo Information System (UNCTAD)
AGOA	African Growth and Opportunity Act
ASYCUDA	Automated System for Customs Data (UNCTAD)
BIT	Bilateral Investment Treaty
CIM	Contract for International Carriage of Goods by Rail
COMESA	Common Market for Eastern and Southern Africa
DTT	Double Taxation Treaty
ECCAS	Economic Community of Central African States
ECMT	European Conference of Ministers of Transport
ECOWAS	Economic Community of West African States
FDI	foreign direct investment
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
HGV	heavy goods vehicle
ICT	information and communication technologies
ITU	International Telecommunication Union
LDC	least developed country
LLDC	landlocked developing country
MERCOSUR	Southern Common Market
SADC	Southern Africa Development Community
SIDS	small island developing states
SMGS	Agreement on International Rail Transport of Goods
TIR Convention	Convention on the International Transport of Goods under Cover of TIR Carnets
TNC	transnational corporation
UEMOA	West African Monetary and Economic Union
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
WTO	World Trade Organization

ACKNOWLEDGEMENTS

This report was prepared by Ernest Mbuli, a former UNCTAD staff member currently working as a consultant with UNCTAD's Special Programme for Least Developed, Landlocked and Island Developing Countries. Specific inputs were received from Utumporn Reungsuwan. The work was carried out under the overall supervision of Habib Ouane, head of the Special Programme for LDCs.

Background papers were prepared by UNCTAD's divisions for International Trade and Commodities (DITC), Investment, Technology and Enterprise Development (DITE), and Services Infrastructure for Development and Trade Efficiency (SITE), under the coordination of Bonapas Onguglo, Masataka Fujita and Peter Faust, respectively.

The manuscript was reviewed by Taffere Tesfachew and edited by Talvi Laev.

Final production of the report was facilitated by Christopher MacFarquhar, Brigitte Ruby-Cosgrove, Jean-Marc Humblot, Jean-Claude Mporamazina and Regina Ogunyinka, with the latter providing secretarial support. Christophe Manceau designed the cover, and overall design, graphics and desktop publishing were done by Madasamyraja Rajalingam.

OVERVIEW

The 1995 Global Framework for Transit Transport Cooperation between Landlocked and Transit Developing Countries and the Donor Community provides a sound strategy for dealing with the transit problem. It challenges landlocked and transit developing countries to strengthen their transit transport cooperation by adopting and implementing policy measures and actions designed to improve their transit systems, and it urges the donor community to support such commitments. The countries involved and the donor community have kept their promises only to a limited extent. While the countries have concluded many bilateral and regional agreements, implementation remains patchy. Similarly, while financial and technical assistance from the donor community has continued, resources, particularly in the form of official development assistance, have declined significantly. Steps must be taken to reverse this trend.

Substantial financial resources are required for the maintenance and upgrading of not only transport infrastructure (road, rail, ports) but also related transit facilities at national borders and inland terminals, as well as telecommunications and energy infrastructure and pipelines. Given their lack of adequate government financial resources (owing to financial crises, budget deficits and austerity programmes), governments in landlocked and transit developing countries should encourage private-sector participation in infrastructure development. Indeed, in recent years various forms of private-sector involvement have been introduced. A number of railways (in Bolivia, Burkina Faso, Malawi, Mali and Senegal) have been concessioned. In the road sector, there are build-operate-transfer (BOT) and toll road schemes in landlocked developing countries (LLDCs) and transit countries (Mozambique, Paraguay and South Africa), port concessions (Djibouti and the United Republic of Tanzania) and increasing private-sector participation in the telecommunications sector.

Another modality that has proved useful relates to the corridor development concept. This addresses the “chicken-and-egg” problem facing infrastructure in countries with low income levels: on the one hand, infrastructure investment is not viable until economic activity justifies it (i.e. transport is a derived demand), while, on the other hand, economic activity cannot emerge unless there are adequate transport facilities. Also, development of the latter is impeded by high

costs until traffic flows increase to levels where economies of scale can be achieved and competition becomes more effective.

The corridor approach addresses this issue by seeking to concentrate viable industrial investment projects within selected corridors connecting inland production areas to ports at the same time as infrastructure investment takes place. The corridor development concept has been very successful in the case of the Maputo Corridor. Other development corridors in the Southern African Development Community (SADC) region include the Beira development corridor between Mozambique and Zimbabwe.

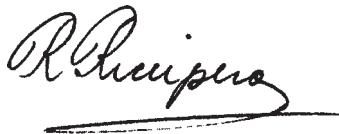
The international community should encourage foreign direct investment (FDI) to contribute to the development and upgrading of infrastructure and increase the volume of official development assistance (ODA) and donor coordination. Because purely private financing schemes may not be feasible in many landlocked and transit developing countries, the international community is invited to promote new modalities of financing such as the following:

- **Regional venture funds** – Grants from multilateral organizations are used to pay development and management fees for selected countries or projects and to help promote interest in riskier infrastructure projects by reducing development risks.
- **Equity participation in local financial institutions** – A foreign institution purchases shares in a selected bank that lends to small infrastructure projects.
- **Co-financing** – This involves parallel loans to an infrastructure project by a multilateral financial institution and the local bank.
- **Bank-to bank loans** – A foreign institution makes a long-term loan to a local bank for forward lending to small infrastructure projects.

In the United Nations Millennium Declaration, the Heads of State and Government committed themselves “to an open, equitable, rule-based, predictable and non-discriminatory multilateral trading and financial system.” Implementation of the Millennium Development Goals and of the Doha work programme should provide the international community with the opportunity to adopt measures in favour of landlocked and transit developing countries. Assistance is also urgently needed to strengthen regional economic groupings in order to attract expanded FDI that would enable LLDCs in particular to promote industries and activities that are not sensitive to distance.

The international community should also strengthen its support for technical cooperation programmes in the trade and transit transport sector so as to improve the human and technological capacity of landlocked and transit developing countries. UNCTAD's technical cooperation programmes, including the Automated System for Customs Data (ASYCUDA) and the Advance Cargo Information System (ACIS), which have contributed significantly to improving transit transport in LLDCs and their transit neighbours, should continue to give priority to this group of countries, particularly to regions that have not yet benefited from such programmes.

The International Ministerial Conference of Landlocked and Transit Developing Countries and Donor Countries and International Financial and Development Institutions on Transit Transport Cooperation, scheduled to be held in Almaty, Kazakhstan, from 25 to 29 August 2003, should galvanize greater political will and determination for action. The Conference could agree on performance indicators and implementation modalities for monitoring and reviewing progress in the implementation of a New Programme of Action for Transit Cooperation. It should also recognize and underscore the role that regional trade expansion and foreign direct investment can play in reducing the transit cost burden and promoting economic diversification, thereby accelerating the development of landlocked and transit developing countries.

A handwritten signature in black ink, appearing to read 'R. Ricupero', with a long horizontal flourish underneath.

Rubens Ricupero
Secretary-General of UNCTAD

INTRODUCTION

A landlocked country is defined in the United Nations Convention on the Law of the Sea as a State that has no sea coast. In practical terms, landlocked countries are located in the interior of continents, hundreds or even thousands of kilometres from maritime ports. In Europe, despite this geographical handicap, landlocked countries are as prosperous as their coastal neighbours, which implies that it is also possible for landlocked countries in developing countries to overcome the disadvantage caused by their location and prosper. Currently, however, most landlocked developing countries (LLDCs) are very poor; indeed, many of them are poorer than their coastal neighbours, which suggests that LLDCs encounter difficulties over and above those experienced by other developing countries.

When the UN General Assembly, in its resolution 1028(XI) (adopted on 20 February 1957), invited the Governments of member States “to give full recognition to the needs of landlocked member States in the matter of transit and trade”, there were only five independent landlocked countries: Afghanistan, Bolivia, the Lao People’s Democratic Republic, Nepal and Paraguay. Forty-four years later, when in 2001 the General Assembly, in its resolution 56/180, decided to convene the first International Ministerial Conference of Landlocked and Transit Developing Countries and Donor Countries and International and Financial Development Institutions on Transit Transport Cooperation, there were 30 such countries, which together constitute about 7 per cent of the population of all developing countries.¹

This report was prepared in response to that resolution and in particular paragraph 15, which requests UNCTAD to provide substantive support to the Conference. It reviews the current situation of transit systems, including the implementation of the 1995 Global Framework for Transit Transport Cooperation between Landlocked and Transit Developing Countries and the Donor Community and makes recommendations that can help the Conference adopt effective policy measures and actions designed to improve transit transport systems in landlocked and transit developing countries. The report is divided into three chapters. Chapter I analyses the factors that hamper LLDCs’ economic development, and it argues that their successful development requires not only a reduction in transit costs but also economic diversification. Chapter II examines issues related to transit transport, trade expansion and

investment. It concludes that landlocked and transit developing countries should pursue three mutually supportive policy instruments which, when used together, can have a major positive impact on their economic development: (a) improvement of transit systems to reduce transit costs and enhance LLDCs' competitive position in foreign markets; (b) promotion of regional trade and integration to attract increased FDI; and (c) for LLDCs in particular, efforts to attract FDI to industries and activities that specialize in the production of high-value, low-weight products (in other words, using FDI to achieve economic diversification). Chapter III outlines the international support measures needed to promote efficient transit transport systems and economic diversification. While acknowledging that landlocked and transit developing countries bear the primary responsibility for their own development, it urges the international community, including financial and development institutions, to provide stronger support to these countries.

I. FACTORS THAT HAMPER ECONOMIC DEVELOPMENT IN LANDLOCKED DEVELOPING COUNTRIES

A. Geographic and demographic factors, climate, remoteness and isolation from markets

LLDCs have to cope with many factors that hamper their economic development. Many of them cannot benefit from economies of scale in production and consumption because of small population size, which is caused either by the country's small geographic size (Bhutan, Lesotho) or by low population density (Mongolia, Niger). In a third of LLDCs, climatic conditions make economic development particularly difficult and risky, as a single prolonged drought can destroy long-term investments in economic activities such as ranching, which provides a source of livelihood for many people in those countries. Remoteness and isolation from world markets affect most LLDCs. Four Central Asian LLDCs (Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan) are located at least 3,500 kilometres from the nearest maritime ports. Another seven face more than 1,500 kilometres of overland transport for their imports and exports, while the remaining, with the exception of Malawi,

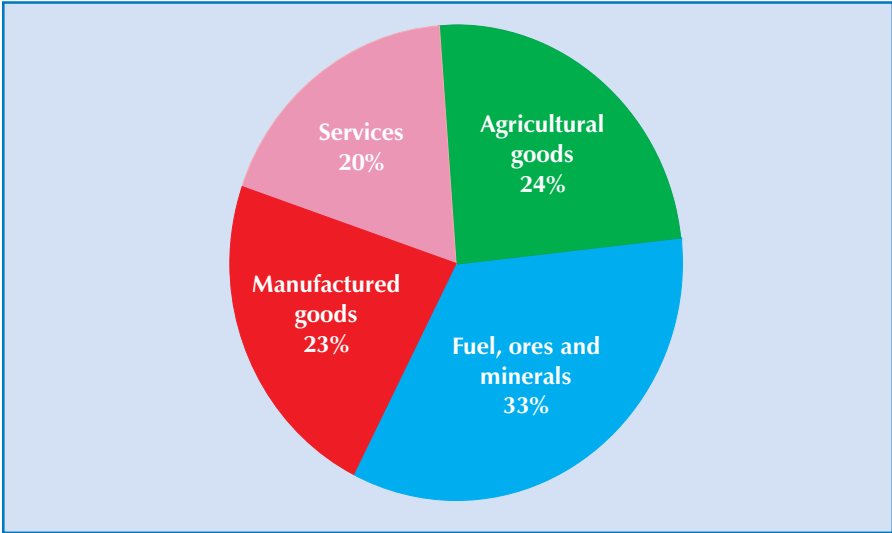
Paraguay and Swaziland, are situated more than 1,000 kilometres from maritime ports. Given the long distances and the structure of their exports, which are dominated by low-value bulky commodities, freight and related transit costs are burdensome relative to the low value of exports. Transit costs for sugar and soya beans, for example, can constitute as much as 40 per cent of the value of the commodity.

LLDCs are characterized by a narrow economic base and poor export performance. Exports per capita in 2000, for example, were only 23 per cent of those of all developing countries, and imports per capita were just over 25 per cent (see Tables 1 and 2). While export values for all developing countries grew at respective average rates of 3.2 per cent and 8.7 per cent during 1980–90 and 1990–94, the corresponding figures for LLDCs were only 2.9 per cent and 0.4 per cent. Statistics also show that about 70 per cent of aggregate exports from the 30 LLDCs are comprised of mineral and agricultural commodities and tourism services (see Chart 1). A large majority of LLDCs specialize in agricultural and mineral products for exports, and only a few in manufactures.

LANDLOCKED DEVELOPING COUNTRIES*



* The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

CHART 1. AGGREGATE STRUCTURE OF LLDC EXPORTS, 2001

Source: UNCTAD Statistical Handbook 2002.

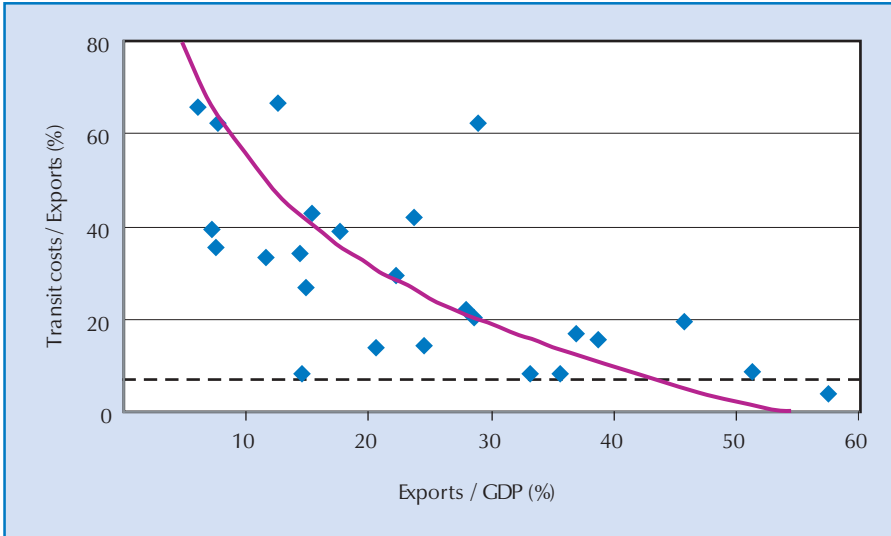
To illustrate their overdependence on a small number of export commodities: half of LLDCs rely on one commodity for at least 50 per cent of their total exports by value; two commodities account for at least three quarters of their export earnings; and three commodities yield at least 80 per cent of their export earnings (see Table 3).

B. High transit costs

LLDCs' trade structure weighs heavily in their trade costs. Ad valorem trade costs (see Table 4), covering freight and insurance costs for exports, are higher in LLDCs (12.9 per cent) than in other developing countries (8.1 per cent) and developed countries (5.8 per cent), owing to high transit costs and risks associated with exports from LLDCs. However, such trade costs vary considerably among LLDCs, from under 5 per cent for the Lao People's Democratic Republic and Swaziland to over 50 per cent for Chad and Malawi, suggesting that the transit cost disadvantage can be mitigated.

Economic data for LLDCs show a negative correlation between transit costs and exports; as transit costs rise, exports' share in gross domestic product (GDP)

CHART 2. LLDC TRANSIT COSTS AND EXPORTS, 2002*



Source: UNCTAD calculations based on *IMF Balance of Payments Statistics 2002* and *UNCTAD Statistical Handbook 2002*. The graph has been calculated using each LLDC's most recently reported annual transit costs (transportation and insurance payments incurred for all goods exports) and the corresponding value of goods exports and GDP in that year.

- * Includes data for the following years and countries: (2000) Armenia, Azerbaijan, Bolivia, Burundi, Ethiopia, Kazakhstan, Kyrgyzstan, the Lao People's Democratic Republic, Lesotho, The former Yugoslav Republic of Macedonia, Mongolia, Nepal, Paraguay, Rwanda, Swaziland, Uganda and Zambia; (1999) Botswana; (1997) Mali and Turkmenistan; (1995) Niger; (1994) Burkina Faso, the Central African Republic, Chad, Malawi and Zimbabwe. No data are available for Afghanistan, Bhutan, Tajikistan or Uzbekistan.

falls (see Chart 2). This suggests that high transit costs may significantly reduce the potential for export-led economic growth in LLDCs. Thus, high transit costs can act to keep LLDCs in a low-level equilibrium income trap by preventing these countries from achieving higher income levels,² particularly given the substantial reductions in potential gains from trade that necessarily result from transit costs (for both imports and exports) that are appreciably higher than the world average.

Nearly all LLDCs have low GDP per capita, while coastal economies generally have a relatively higher GDP per capita.³ Developing countries with coastal proximity have a clear advantage in establishing competitive

manufacturing export sectors, which in turn have contributed significantly to overall economic growth.⁴ One analysis of the West African Monetary and Economic Union (UEMOA) showed that coastal member States were the main exporters and were well endowed with transportation infrastructures, while landlocked countries were the main importers, had relatively low levels of paved roads, and served as a periphery to the coastal countries. Their export-to-GDP ratio was only half that of their coastal neighbours.⁵

The median landlocked country tends to incur transport costs 50 per cent higher than those of the median coastal country, and to have trade volumes that are 60 per cent lower.⁶ Notably, the high transit costs faced by LLDCs have become a far more restrictive barrier to trade than tariffs in major markets. For instance, tariffs in Canada, the European Union, Japan and the United States vary from averages of 3 to 7 per cent on goods originating in most LLDCs. In contrast, transit costs paid by LLDCs are on average almost three times higher than these average tariffs.

LLDCs are also negatively affected by the high cost of their imports. A rough measure of the transit cost disadvantages faced by LLDCs is provided by balance-of-payments statistics that show freight costs as a proportion of landed cost of imports. In 1995, freight costs for developed countries were approximately 3.5 per cent of the c.i.f. import values, whereas for LLDCs they were about three times this percentage (see Table 5). For LLDCs in West Africa they were approximately 19.7 percent; in East Africa, 13.5 percent; and in Latin America, 14.2 percent. The freight costs of the sample of landlocked countries exceeded the freight costs of all countries in their respective continents by 6 to 11 percentage points.

The high transport costs of LLDCs' imports inflate the prices not only of consumer goods but also of capital goods and intermediate inputs such as yarn, thereby increasing the cost of domestic agricultural and industrial production (as does import protection unless duty drawback or waiver schemes are in operation). Thus a significant reduction in the transport cost of these countries' imports would increase their purchasing power and boost their domestic production, supporting their diversification efforts and increasing the competitiveness of their exports.

With increased competition in major markets forcing business to adapt to just-in-time production and management systems, flexibility, speed and

reliability in delivery of goods have assumed significant importance. Yet, for many LLDCs, inadequate infrastructure, poor transport organization and a proliferation of government controls make it difficult to guarantee timely delivery of goods or ensure reliability or flexibility in the supply of goods. The fact that delays can occur outside the territorial boundaries of LLDCs underlines the point that these countries acting alone would not be in a position to overcome the real obstacles.

A recent case study prepared by the UN Economic and Social Commission for Asia and the Pacific (UNESCAP) reveals that, in road transport between Kazakhstan and Europe, more than 50 per cent of transit time is spent waiting at border crossing points.⁷ The overall time of 10 to 20 days could be reduced by half. With respect to railway border crossing, the same study indicates that whereas the average border crossing times in Europe range from 30 to 40 minutes, those in the Commonwealth of Independent States countries are measured in days rather than hours. Border crossing delays also constitute a major problem in Africa and Latin America. It has been estimated that delays at major border posts in Southern Africa cost the region in the range of \$48 million annually. Border post delays in Southern Africa range from 4 to 26 hours on average (see Chart 3).

CHART 3. DELAYS AT SELECTED SOUTHERN AFRICAN BORDER POSTS

Corridor	Border post	Countries	Estimated delays (hours)
Beira	Machipanda	Mozambique/Zimbabwe	24
	Zobue	Mozambique/Malawi	24
	Mutare	Mozambique/Zimbabwe	26
Maputo	Ressano Garcia	South Africa/ Mozambique	6
	Namaacha	Swaziland/Mozambique	4
North-South	Beit-Bridge	South Africa/Zimbabwe	36
	Chirundu	Zimbabwe/Zambia	24
	Victoria Falls	Zimbabwe/Zambia	36
	Martins Drift	South Africa/Botswana	6
Trans-Caprivi	Kazungula	Botswana/Zambia	24
Trans-Kalahari	Buitepos	Namibia/Botswana	6
	Pioneer Gate	Botswana/South Africa	4
TANZAM	Nakonde	Zambia/Tanzania	17

Source: SADC Transport Corridor Agenda, July 2000 study by InfraAfrica Consultants.

C. Inadequate trade and investment

For LLDCs, the proportion of total exports and imports whose destination or source is a country in the same region or continent is low but growing (see Table 6). Regional trade is very important for Afghanistan, the Lao People's Democratic Republic, Nepal, Paraguay and Tajikistan but significantly less well developed in many African LLDCs. One might expect there to be a large proportion of such trade because of lower average transit costs, given the shorter distances involved. However, physical infrastructure bottlenecks and non-physical barriers limit the apparent advantage of proximity and regional trade expansion.

In general, LLDCs perform poorly as hosts for FDI. Their combined inward FDI flows in 2001 amounted to just \$4.6 billion, accounting for some 3 per cent of total world flows in 2001. The 15 African LLDCs received a total of only \$984 million. The average FDI per capita for LLDCs during the 1990s was \$12.6, well below the developing-country average of \$33.7 during the same period. In 2001, the combined stock of FDI in LLDCs was \$42.2 billion, less than 2 per cent of the total stock in developing countries (see Table 7). The poor performance of LLDCs by these indicators suggests that there may be a connection between lack of territorial access to the sea, remoteness and isolation and the ability of countries to attract FDI.

II. PROMOTING EFFICIENT TRANSIT TRANSPORT SYSTEMS AND ECONOMIC DIVERSIFICATION

The first paragraph of the introduction to this report suggests that LLDCs, could ultimately, like Switzerland and Austria, overcome their geographical handicap and prosper. But what strategies can ensure their success? LLDCs may not have to traverse the long development history traced by these role models. However, in designing their development programmes, they may wish to consider three objectives that are mutually reinforcing and that appear to have been fundamental to the success of the role models: (1) the development of adequate national transport networks and efficient transit transport systems, (2)

proximity to a large regional market and (3) promotion of industries and activities that are not sensitive to distance.

A. Improving transit transport systems

In 1271, when Marco Polo set out for China on the Silk Road, overland travel was done on horseback. Travel was dangerous and tedious, and travellers were grateful just to reach their destination safely. Nowadays, rail and road transport have replaced the beast of burden and international trade has grown by leaps and bounds. Yet overland transport across national borders continues to present many challenges and difficulties associated with a host of adverse conditions, such as inadequate infrastructure, inefficient transport organization, trade imbalances, poor utilization of assets, and a proliferation of government controls and other physical barriers.

1. Enhancing physical infrastructure and transport services

Rail transit: Many LLDCs in Africa, Asia and Latin America are linked to the sea by rail and benefit from the advantages of the lower freight rates that rail transit can offer for long haul of low-value bulk commodities.⁸ However, rail transport worldwide has been losing its share of the freight market to road transport, owing to a host of physical, operational and regulatory constraints, and it is likely to lose further ground unless it manages to overcome its problems. The poor financial condition of railways has led to deferred

Box 1. BEST-CASE SCENARIO FOR TRANSIT FACILITATION

Containerized goods are discharged in the port. All documentation is in order and has been transmitted electronically to Customs, which has pre-cleared the goods for transit. Customs inspects the seal and the transport operator gives a guarantee for the amount of the duty. There is a transit agreement in place that allows a number of transport operators to transport the goods along the transit corridor. The multimodal transport operator selects one of these operators to undertake the whole transit operation. There are harmonized customs transit documents. At the border, a joint border post team inspects the cargo documents, the seal and the drivers documents. Everything is in order and the driver repeats the procedure at the next border. Customs representatives have been informed of the expected arrival time at the consignee's premises and are there shortly after the arrival of the truck and container to clear the goods. The truck has found a return load through a local cargo exchange, so that the return journey will generate revenue and at the same time make use of the container.

Box 2. WORST-CASE SCENARIO FOR TRANSIT FACILITATION

Containerized goods arrive in a port and need to be transported to a landlocked country. The ocean transport was carried out under a negotiable bill of lading, which is required to obtain discharge of the goods. However, the bill of lading is not available, and after a considerable delay the goods are finally discharged against a letter of indemnity. While a description of the goods is available, there is no invoice to determine their value, so the Customs transit declaration cannot be finalized. To check for forbidden goods, the container is opened, and the goods are removed for inspection and then reloaded and resealed in the container. The invoice arrives, documentation is completed, port charges are paid, and the road transport operator pays a deposit to Customs equivalent to the value of duty for the goods. The truck and container must wait again until there are a sufficient number of trucks to make up a convoy with a Customs official. Finally the convoy leaves the port area.

Enroute to the border, it is stopped twice by security agents for documentation control and to check the seals. At one control point, security breaks the seal to check the cargo and then replaces the seal with its own seal. At the border, the driver's license and vehicle insurance is not valid in the next country, and another transport operator must provide ongoing transport. The container must therefore be unloaded from the original truck, which travels back empty. The Customs authority of the first transit country inspects the seal and, as it has been changed, requests the cargo to be removed and checked to see if any goods have gone missing. The goods are reloaded into the container and a new seal is placed. The container is loaded onto a different truck that can operate in the next country. A full day has been lost at the exit border of the first transit country because the arrival time of the original truck was not known and because of the Customs inspection.

The next country is also a transit country and only allows the temporary import of containers against a deposit. At the entry point a new Customs transit declaration is prepared, the goods are unloaded from the container and inspected by security, subsequently by Health officials, and a third time by Customs. The goods are then reloaded into the container and it is sealed. The trucker pays a deposit for the duty value of the goods plus 20 per cent as an incentive to discourage theft. The truck is allowed to travel without a Customs official but must stop at three weigh stations to make sure the weight of the goods does not change.

At the final border, the Customs officials of the second transit country inspect the seal and clear the goods. However, once again the truck and driver are not allowed to continue, and new transport for the container must be arranged. The Customs authority of the importing country clears the goods at the border, which takes 48 hours and involves the stripping and stuffing of goods from the container. Upon arrival at the final destination, some of the goods are found to be missing and others are damaged. The consignee does not know during which stage of the transport the loss/damage occurred. As several transport documents were issued for different stages of the transport, the consignee does not know which party to sue for the loss. Under all the transport documents issued, the carrier's liability is severely restricted. No international mandatory convention on carriage of goods by sea or by road applies, and neither does mandatory domestic law.

maintenance, weak infrastructure and speed limits;⁹ the aging of rolling stock produced frequent breakdowns, further reducing capacities and ability to meet traffic demand;¹⁰ and the inability to settle inter-railways' accounts for hire of wagons and equipment has undermined cooperative arrangements. As a result, railways have become increasingly reluctant to allow their wagons to move beyond national borders, thereby further undermining customer confidence in international railway services.

A long-term vision for railways in Africa, Asia and Latin America is embraced in regional infrastructure programmes such as the Trans-Asian Railway networks. In the short to medium term, however, urgent efforts are required to mobilize public and/or private investment to ensure adequate working capital and investment for rehabilitating and upgrading existing infrastructure, including rationalization, which may well entail discontinuation of certain railway lines that do not serve current or anticipated future needs. To enhance the sector's competitiveness, inter-railway agreements and arrangements should reinstate and/or promote the following:

- **Movement of through trains** (block trains, express trains) - Many adjoining railways no longer operate regular services because of difficulty settling accounts and late return of wagons to home lines. This trend should be reversed by strengthening inter-railway arrangements and agreements.
- **Consignment notes** — In Asia, the railways of the People's Republic of China, Central Asia and the Islamic Republic of Iran accept the SMGS consignment note based on the Agreement on International Rail Freight Communications (SMGS). However, this consignment note is not accepted in Western Europe, where the CIM consignment note is used instead. Greater efforts should be made to adopt and/or implement a common consignment note in Asia/Europe as well as Africa and Latin America. Harmonization of tariffs – Traditional commodity-based railway tariffs are an obstacle to multimodal transport. Unit rates and through tariffs per container unit would better serve the needs of customers.
- **Combined liability of railways** — Traditionally, domestic legislation determines the liability of railways, but this approach is not suitable for transit goods carried by two or more railways. LLDCs and their transit neighbours should adopt regional agreements that establish uniform rules concerning the contract for international carriage of goods.
- **Information and communication technologies** (ICT) — An integrated train operation management system would improve railway operations, enabling better use of transport equipment (e.g. locating equipment to facilitate

quicker turnaround times; effective maintenance monitoring); improved quality of transport services to customers (shipper, forwarder); and availability of data on the whereabouts of cargo (thereby facilitating off-take and delivery and reducing insurance costs). Some railways have installed information systems (see South Africa's SPRINT system and UNCTAD's Advance Cargo Information System, ACIS).

Road transit: With technological developments enabling the manufacture of larger and faster road vehicles, road transport in the 1980s easily outpaced railways as the leading means of overland transport in developing countries as well as elsewhere in the world. However, the development of road infrastructure was uneven, favouring centres of population at the expense of rural areas where food and agricultural exports are produced. As a result, both domestic and international transport costs are very high. For LLDCs like Chad and the Central African Republic, which have no alternative routes to the sea by rail, the total cost of international trade is exorbitant (see Tables 4 and 5).

The long-term development of highways in Africa, Asia and Latin America is in regional infrastructure programmes. Although road transit dominates the international carriage of goods, its advantage of quick door-to-door service has not been attained. Efforts made to coordinate infrastructure development and harmonize domestic regulations, procedures and documentation are commendable, but a greater commitment by landlocked and transit developing countries to effective implementation of their bilateral and regional agreements is now required. Three areas call for particular attention:

- **Maintenance of infrastructure**, including improvement of border crossing facilities - Public-sector reforms to establish dedicated road sector planning and maintenance units, as well as road funds and equipment to enforce axle-load regulations, are required.
- **International customs transit systems** — The most successful system is the TIR Convention, which has been applied across most of Europe and is spreading to North Africa and Central Asia. The Economic Community of West African States (ECOWAS) and the Common Market for Eastern and Southern Africa (COMESA) have adopted similar regional systems but have yet to implement them. Urgent action should be taken to implement them. Customs transit information systems such as UNCTAD's Automated System for Customs Data (ASYCUDA) can provide the tools for more effective and timely monitoring of transit movements, which can help reduce fraud, smuggling and corruption and enhance confidence in public authorities.

- **Harmonization of traffic regulations** —This can be accomplished through accession to the Convention on Road Traffic (1968) and the Convention on Road Signs and Signals (1968); accession to regional motor insurance schemes (e.g. the Green Card in Europe for countries such as Kazakhstan and Kyrgyzstan, the Brown Card in West Africa, and the Yellow Card in Southern and East Africa); and efforts to harmonize transit charges. COMESA, for example, applies harmonized transit charges based on \$10 per 100 kilometres for heavy goods vehicles (HGV) with more than three axles, \$6 per 100 kilometres for rigid HGV, and \$5 per 100 kilometres for big buses carrying more than 25 passengers. The European Conference of Ministers of Transport (ECMT) operates a multilateral permit scheme for journeys between its member countries, which include Azerbaijan. COMESA has a similar scheme. The COMESA Carrier Licence and Transit Plates introduced in 1991 are accepted in Burundi, Kenya, Malawi, Rwanda, Swaziland, Zambia and Zimbabwe.

Inland water transport: Inland water transport can offer competitive freight rates for low-value, high-bulk commodities. Indeed, until the 1970s river transport along the Congo-Oubangui and Paraguay-Parana river systems provided the main mode of transport for the Central African Republic¹¹ and Paraguay,¹² respectively. However, because of numerous adverse factors stemming from physical/material constraints as well as operational/management-related and regulatory ones, inland water transport in general, and river transport in particular, have lost a significant share of the freight market. Chad's transit trade for example, has ceased to use the Congo-Oubangui river system. Currently 60 per cent of Paraguay's major export crop, soya, is transported by road.

To realize its potential and safeguard navigational safety and environmental protection, inland water transport involved in transit trade should observe international principles related notably to free navigation, equal treatment, free transit and reciprocity, multilateral treatment of cargo reservations, rules for ship owners, transport and trade facilitation, provision of adequate port and navigational services, dispute settlement procedures, navigational safety, environmental protection, and simplified and harmonized customs procedures.¹³

Port facilities and services: Transit cargo to and from LLDCs constitutes a small proportion of cargo throughput in the ports of many developing countries. However, while port expansion may not be a particular concern for them,

general problems affecting ports, such as port congestion, industrial strikes and poor management, are of great interest to them.

For many LLDCs, delays in cargo clearance in maritime ports are often associated with problems such as late arrival of documents (notably bills of lading), poor coordination among the principal agents handling cargo at various stages (shipping agents, port authorities, custom forwarders), and inadequate off-take capacity. To improve the situation, measures should be taken to address three issues:

- **Negotiable bills of lading** — Wherever negotiable documents are not required for the sale of goods in transit or under a letter of credit, their use should be discouraged so as to avoid problems associated with the requirement of presentation of the document. Instead, the use of non-negotiable transport documents and, where possible, of electronic alternatives should be encouraged.
- **Cooperation and communication** — Improved communication is needed among the principal agents at the port. Advance information, using ICT, about ship arrival and cargo volumes would facilitate planning for both cargo clearance and off-take transport arrangements.
- **Deregulation** — Removal of transport service restrictions would increase the capacity and efficiency of off-take transport services.

Airfreight: LLDCs make considerable use of airfreight expressed in terms of tonnes/kilometre. All of them have at least one international airport that is frequented by international or regional carriers. Although runways in some countries are considered to be short (e.g. 3 kilometres), the more serious problems are related to support services. Several of the airports need new passenger terminals and freight sheds. Facilities like cold storage as well as modern documentation, security and handling systems are inadequate. Air traffic control and navigation do not impair long-haul operations, although some LLDCs are less well equipped and may need greater use of satellites for voice communication.

2. Improving transit facilities and support services

Dry ports: A number of landlocked and transit countries have established dry ports with the support of the international community, including UNCTAD. Dry ports are inland terminals to which shipping companies issue their own import bills of lading for import cargoes, assuming full responsibility for costs and conditions, and from which shipping companies issue their own bills of

loading for export cargoes. Dry ports are closely associated with the promotion of the through-transport concept. This service is most readily achieved by switching to the use of containers. The door-to-door transport concept involves the adoption of procedures to transfer goods from their place of origin to their final destination without intermediate customs examination; intermediate handling thus occurs only at points of transfer between different transport modes. For landlocked countries, the concept envisages no internal examination of goods or containers by customs at the seaport; a customs transit procedure will need to be implemented in the maritime countries. Implementation of the door-to-door transport concept offers the potential for substantial savings in transit costs. When the introduction of dry ports is associated with simultaneous implementation of the door-to-door transport concept, facilities provided at dry ports need to have the capability to handle full and empty containers, including stuffing and unstuffing of containers as well as short-term storage of containers. Fully established dry ports provide the following facilities:

- Offices of shipping line agents
- A railway goods office
- Road haulage brokerage
- Cargo packing services
- Consignment consolidation services
- Unit train assembly and booking services
- Container clearing services
- Computerized cargo-tracking services
- Container repair facilities
- Clearing and fumigation services (atmospheric and vacuum)
- Refer refrigeration points
- Weigh bridges
- Customs clearance

Border crossing points: While delays can occur at any stage of the transit journey, the most notorious delays occur at the main interface or transshipment points, namely between maritime and inland transport, between adjoining railways networks, and on both sides of national borders. Inadequate rail/road off-take capacity in maritime ports can and does cause major delays, slowing ship turnaround times, which often triggers port demurrage charges for all port users. The slow interchange of rolling stock between railway networks

not only holds up goods in transit, thereby tying up capital, but also results in poor utilization of railways' assets, thus reducing their revenue incomes. Border posts place particularly severe constraints on road transit.

Border crossing delays result largely from inadequate physical infrastructure facilities and lack of coordination among the various agents working on a given side of the border and between them and their counterparts across the border. Action is needed:

- To improve the layout of border facilities and introduce shared facilities as recommended in the International Convention on the Harmonization of Frontier Control of Goods (1982)
- To provide electricity and telecommunications facilities
- To improve inter-agency coordination of all border control services (customs, immigration police) and private-sector operators (forwarders, transporters)
- The use of **management information systems** to link operators at the border and establish communication between them and their headquarters should be encouraged.

Institutional support arrangements for transit: Collaboration between public- and private-sector participants in transit transport is critical for the success of transit transport programmes, including introduction of information technologies. Even as many Governments retreat from commercial transport operations, they retain the key roles of financing physical infrastructure, maintaining and managing such infrastructure, and formulating and enforcing laws and regulations. For its part, the private sector, as the main provider of transport services, has first-hand knowledge of the bottlenecks and obstacles encountered in day-to-day operations, and as such is best positioned to propose viable and practical solutions for improving transit systems. The private sector has a major stake in ensuring that transit transport facilitation measures and the use of information technologies succeed, since it is a direct beneficiary of the measures designed to harmonize inter-State regulations and simplify administrative and customs procedures. The participation of the private sector in policy formulation and decision making will not only facilitate the adoption of suitable measures but also secure the sector's cooperation in implementing the new measures.

To be effective, consultations between the public and private sectors should be regular and should be institutionalized through trade and transport facilitation committees. Such committees bring together representatives of all

public and private parties concerned with international trade and transport facilitation in a country: governmental entities, service providers and transport users. Public- and private-sector collaboration should extend beyond policy formulation and the introduction of new systems. Modalities should be established to ensure the sustainability of technical and investment programmes. Some initiatives have been taken by the private sector to ensure that activities and investments in particular transit corridors collectively meet users' requirements and are locally financed and maintained.

Human capacity building: The changing role of the public and private sectors requires improvement of the skills of those involved in policy-making as well as of those responsible for day-to-day operations through training, including continuing education for staff members. Increasing the quality and quantity of primary and secondary education in landlocked and transit developing countries is fundamental for building absorptive capacity for investment and implementation of reforms. The shortage of skilled labour is a major impediment to attracting and benefiting from FDI. The private sector, including foreign investors, can and should contribute to the upgrading of professional skills in landlocked and transit developing countries. It can provide efficient supply chain management, and there is the ripple effect of technology diffusion. But for the private sector to participate fully, a climate supporting long-term commitment must be apparent in terms of policy frameworks, attitudes and practice.

Telecommunications, energy and pipelines: Landlocked and transit developing countries should invest in energy and telecommunication infrastructure if they want to accelerate their integration into the world economy. Energy and telecommunications infrastructure in LLDCs is insufficient to provide reliable support to transit transport services and operations. Goods are often held up at the borders because, owing to electricity shortages, work to inspect and clear traffic can be done only during daylight hours. Similarly, lack of telephones hinders communications with headquarters. Telecommunications involve various media, including electronic, voice and warning systems in support of transport services, notably air and rail transport. Installation of modern telecommunication systems in airports or railway systems enables existing infrastructure to serve a greater number of aircraft or trains respectively. Government policy change permitting private-sector ownership and management of telecommunications has helped many LLDCs close the telecommunication gap and reap the benefit of ICT.

B. Expanding trade

1. Expanding regional trade

Not only can regional trade reduce the high transit costs facing LLDCs, the changing trade and transport patterns caused by expansion in regional trade could turn many LLDCs into important cross-roads or hubs. Indeed, this is already happening. LLDCs such as Zambia and Zimbabwe have become important transit countries for trade between Southern and East Africa. Central Asia is once again becoming an important land bridge between Europe and Asia, just as in the days of the Silk Road. The implications of these changes for LLDCs are very positive.

First, the changes are bound to make transit issues in general, and the removal of transit barriers in particular, a matter of interest to a large group of LLDCs and coastal countries, leading to a surge of political will to take effective measures and actions. Moreover, the new status of LLDCs as both users and providers of transit facilities should give them greater leverage in negotiating terms and conditions for transit. Finally, regional trade expansion and integration would make it possible for small LLDCs in a region to attract increased FDI for development. Indeed, it has often been argued that a major reason for the economic success of landlocked countries in Europe has been their proximity to and membership in large regional markets, which has made them attractive to FDI.

2. Expanding international trade

At the international level, further negotiations should be pursued in the World Trade Organization (WTO) under the Doha work programme in order to achieve greater market access and reduction of market entry barriers to goods (industrial and agricultural products, including commodities) and services. Provision of preferential trade access for all LLDCs and deepening of existing preferential measures should be considered. These preferential measures are, however, useful only to the extent that beneficiaries make effective use of them and that realistic rules of origin matching the productive strength of LLDCs are devised. With respect to services negotiations, at this stage LLDCs and transit member States need to identify their interests so as to be in a position to defend these interests during bilateral negotiations. A major concern of these countries in most services sectors is the building of capacity (supply and competitiveness). Another is the incorporation of their specific needs into the framework of

General Agreement of Trade in Services (GATS) Article IV, leading to transfer of technology and capacity building.

Finally, trade facilitation has for the past four years been the subject of a work programme in the WTO. At the WTO Ministerial Conference in Doha, members agreed to create a road map for possible negotiations on Articles V (freedom of transit), VIII (fees and formalities connected with importation and exportation), and X (publication and administration of trade regulations) of the General Agreement on Tariffs and Trade (GATT) after the Fifth Ministerial Conference as part of the Doha Development Agenda negotiations, subject to a decision on the modalities for such negotiations. This means that the trade round launched at Doha may result in new WTO provisions on trade facilitation. The provision of technical assistance — both to help developing countries participate in the negotiations, and to help them implement the results — would thus be essential.

3. Other trade-related issues

Commodities: LLDCs are not realizing their potential in commodities trade, largely because of transport and physical infrastructure bottlenecks. Thus, at the national level all actors involved in commodities trade (farmers, growers, traders and enterprises), as well as government agencies, should be mobilized to design, adapt and implement integrated transport action plans. With regard to the exposure of oil-importing LLDCs to oil price fluctuations, their governments might examine ways of designing a tax-cum-subsidy fuel scheme in favour of commodity export and intermediate goods import. At the regional level, LLDCs and their transit neighbours need to engage in continuous dialogue to update transit agreements with a view to harmonizing international trade services practices to increase time efficiency and reduce costs along the export process, from the farm to the port of exit.

Environment: Most LLDCs have one or more environmental problems (e.g. desertification, soil degradation, deforestation, water pollution, or limited fresh water resources) that significantly increase their susceptibility to these environmental instabilities. This amounts to a significant challenge for LLDCs in managing their economic activities. Disadvantageous geo-climatic features coupled with the importance of agricultural, tourism and mining activities for LLDCs necessitate effective management of these countries' natural resource endowments, ecosystems and environmental quality.

Competition policy: Enforcement against restrictive business practices by large transport firms may be of benefit to LLDCs, and indeed for coastal countries and their export destinations. Competition policy might be used, for instance, to ensure that the bidding process for privatization or for the granting of concessions does not involve collusionary or exclusionary behaviour, and to assist in creating market structures allowing for the maximum competition possible.

C. Attracting foreign direct investment

1. General policy options

Policies to attract FDI that is not sensitive to distance: Specific policy actions needed for LLDCs to attract FDI can be considered at the group and country levels. The suggestions presented here represent new ways for LLDCs to lessen their dependence on commodities and to diversify their economies.

Attracting FDI to industries and activities that are not sensitive to distance from sea and to related transport costs raises a number of challenges. A major issue here is the development of location-specific advantages that enable LLDCs to participate in the global service and knowledge economy. There are several aspects to this issue. First, there is a need to generate the types of skills needed to attract investment and build local technological capabilities. Developing local knowledge-based resources, combined with the low cost of production in LLDCs, would make them attractive investment locations for certain types of activities. Some of these activities (e.g. call centres) may not necessarily require highly skilled employees and can be implemented successfully by semi-skilled ones. LLDCs can target these activities in particular. The low-cost labour of some LLDCs is a significant advantage here. The emergence of globally integrated production systems based on ICT is a potential opportunity for LLDCs, because it largely eliminates the consequences of geographic distance. LLDCs should pursue policies and actions enabling them to become an integral part of such integrated international production.

The second major task facing Governments of LLDCs in this context is to develop adequate ICT infrastructure. A number of LLDCs have taken initiatives in this direction. Rwanda provides an example of successful development of local ITC infrastructure. Phone and Internet communication in that country has expanded significantly and satellite technology is connecting formerly isolated rural areas.¹⁴ The current situation in most LLDCs, however, leaves much to be

desired. If the share of high-tech exports in total manufacturing exports is taken as a rough proxy for the intensity of activity in this area, the average share for 15 LLDCs for which data are available is 5 per cent, compared with 20 per cent for the world as a whole and about 13 per cent for low- and middle-income countries. Other indicators of ICT development suggest a similar picture. The average number of personal computers per 1,000 people in the LLDCs is 7, compared with 78 for the world as a whole; the combined number of Internet users in LLDCs is 971,800, which in 2001 accounted for 0.2 per cent of the world total.¹⁵ It should be noted that a number of international organizations (e.g. the International Telecommunication Union, the United Nations Development Programme and the World Bank) are taking initiatives to help developing countries build thriving IT sectors.¹⁶ Given the importance of such developments for LLDCs, they should be recognized as a special group, perhaps one that requires additional resources.

The development of local communication infrastructure can be achieved at least partly on the basis of investments by transnational corporations (TNCs) themselves. The success of Uzbekistan in attracting FDI to its telecommunication industry provides an example. This industry accounted for about one-third of the FDI stock in Uzbekistan in 1997.¹⁷ Malawi provides another example. More than 40 per cent of the inward FDI that Malawi received in the late 1990s was in the telecommunications industry; this grew to about 60 per cent in 2000.¹⁸ Similarly, after the privatization of the state-owned Uganda Telecom in 2000, a Swiss-German-Egypt consortium acquired a 51 per cent share and the Government retained the rest. The Government further extended a license for the provision of both mobile and fixed-line telephone services to the South African firm MTN.¹⁹

An important issue in this context is the privatization of telecommunications infrastructure, which in many LLDCs is controlled by the government. TNC participation, if allowed, could contribute significantly to improving existing infrastructure. The development of a mobile phone service by the Ethiopian Telecommunication Corporation in cooperation with Ericsson is a case in point: the result has been tremendous improvement in telecommunication services.

In a number of LLDCs demand for Internet services outpaces supply by a large margin, arresting the pace of growth in this area. In Ethiopia, the government policy of allowing foreign participation in telecommunications is expected to play a major role in closing this gap.²⁰ With a few notable exceptions, TNCs operating in these areas possess more advanced

technological capabilities and more financial strength than those available locally, and these are the resources most needed for further development of local infrastructure.

Once the basic ICT infrastructure is in place, a promising direction that LLDCs can pursue in the context of the global knowledge economy is to prepare the ground for becoming sites for outsourcing of semi-skilled activities that can be transferred electronically (e.g. some back-office activities, such as data processing or certain financial transactions). There has recently been a tremendous surge in outsourcing of information- and knowledge-based activities by TNCs,²¹ which in the process is revolutionizing entire industries in the recipient countries.²² Estimates are that at least 3.3 million white-collar jobs and \$136 billion in wages will shift from the United States alone to low-cost countries by 2015. Europe, too, is said to be joining the trend towards outsourcing.²³ Such activities are particularly suitable for LLDCs, since they are not sensitive to distance from sea and ports. The critical resources that fuel this outsourcing activity are low-cost skilled and semi-skilled labour and telecommunications infrastructure. In particular, LLDCs where such resources are abundant (e.g. Central Asia and some African countries, notably Botswana) should consider making major efforts to place themselves on the TNCs' world map for outsourcing of such activities. Some of the major beneficiaries of this trend (including China, India, the Philippines and the Russian Federation) do not necessarily possess a combination of location advantages (affecting transport costs) superior to those of these LLDCs. English-speaking LLDCs (e.g. Botswana, Lesotho, Uganda and Zambia) or those where the majority of inhabitants have a good command of English (i.e. where English is a second official language, as in Malawi and Swaziland) appear to be particularly well positioned to target such investment.

Specific attention should also be given to targeting investments by service TNCs that produce services that can be delivered online, particularly those relying heavily on low-cost, semi-skilled labour (e.g. certain kinds of financial services). LLDCs can successfully attract financial-service TNCs seeking low-cost production locations for back-office activity, as well as for establishing local presence as part of their pursuit of a truly global strategy. Some LLDCs also have attractive domestic firms for acquisition that can be strengthened and can play an important role in the local market. Uganda is one LLDC that has had some success in attracting foreign financial-service TNCs, including Standard Chartered, Barclays, HSBC and Citibank.²⁴ The surge in financial services activity that followed the sale of the state-owned Uganda Commercial Bank to

South Africa's Standard Bank Investment Corporation in 2002 illustrates the potential benefits of such investment for the host countries.²⁵

In this context, special consideration might be devoted to industries and activities where LLDCs possess advantages whose full exploitation requires the distribution systems and global market knowledge of TNCs. A case in point is the music industry. While some LLDCs have a thriving local music industry,²⁶ most of the local producers are small and do not have the necessary resources to link with global distribution networks or access global markets. Media TNCs might be attracted to these countries.

A special category within the service industries that is not sensitive to distance and should receive specific attention is travel and tourism. Many LLDCs possess tremendous natural beauty that, with the necessary supportive infrastructure (hotels, airports and the like), can be turned into major tourism attractions. For example, tourism offers great potential that has never been fully exploited in Rwanda, a country with some of Africa's most beautiful forests and parks, hosting numerous varieties of animals and birds.²⁷ Similarly, Zimbabwe is a popular tourist attraction for its safari and hunting packages and the famous Victoria Falls. Nepal possesses some of the world's major tourist attractions (not least of them Mount Everest) and has great untapped potential in this respect.²⁸ LLDCs appear to have considerable untapped tourism potential that can be exploited with the help of FDI. By way of comparison, in 1999, the average share of international tourism receipts in the total exports of SIDS was 31 per cent, while the equivalent figure for LLDCs was only 8 per cent. The combined number of tourists arriving in the LLDCs in 1999 was 7 million, compared with 13 million in the small island developing states.²⁹ Regional tourism appears to be particularly attractive, especially in Africa, where many LLDCs neighbour each other. For example, a tourist landing in Rwanda can reach the tourist attractions of Uganda in less than two hours and those of Tanzania in less than 10 hours, all on relatively good roads.³⁰

Another direction for LLDCs to follow when developing strength in areas that are not sensitive to transport costs is encouraging the development of industries and activities (e.g. cut flowers, fruits and vegetables) that can rely on air transport for delivery of products. Switzerland provides a model of a country that has successfully overcome its geographic limitations by specializing in the production of high-value, low-weight products (e.g. watches, precision instruments and other outputs of the so-called precision industries, which can be transported by air). Success in this respect will crucially depend on the

development of well-functioning airports. Opening up air transport for FDI is a possibility that should not be overlooked by LLDC governments. Despite long tradition of public ownership of such facilities in most countries, the heavy dependency of LLDCs on means of transport that are less sensitive to distance, coupled with the underdeveloped status of their air flight facilities and the high capital intensity of the investments required, which are often well beyond the reach of many LLDCs, appear to warrant consideration of the involvement of FDI. In this context, there is room to consider regional arrangements between neighbouring LLDCs, which in some cases are too small to support such developments individually. Private investors are particularly well placed to meet the needs of such initiatives.

Another area for investment that is not sensitive to distance and transport costs is local infrastructure, particularly in areas where raw material and intermediaries are available locally. In particular, LLDCs that in the past were cut off from world markets by political instability need massive investment to bring their existing infrastructure, much of which has suffered from chronic under-investment, to modern levels so that it can support activities in other areas. Notable examples include Kazakhstan's transport infrastructure and Uganda's power generation and telecommunication networks. The privatization of previously mostly state-owned monopolies is creating numerous opportunities for FDI in these areas. More generally, FDI may play a central role in investments in transport infrastructure in those LLDCs where the development of such infrastructure is given priority.

Policies to attract FDI that will capitalize on regional integration: There are both demand and supply aspects to the link between regional integration and attracting FDI. From the demand side, many LLDCs are small on their own in terms of market size, but by entering regional agreements they increase their attractiveness by providing access to a larger market than their own. They then become attractive for market-seeking investment because the reduction or elimination of tariffs and other barriers among countries in the region enables major investors to serve them as one large market. The Mekong River subregion (including the Lao People's Democratic Republic, a LLDC) is an example.

From the supply side, regional integration enables major investors to capitalize on advantages of the region as a whole as a production site by spreading value-added activities among different members. LLDCs can search for complementarities with neighbouring countries and target investment that can benefit from them. They can also initiate joint FDI promotion programmes

with their immediate neighbours in order to capitalize on the comparative advantage of each and to promote investment in the region as a whole. Bolivia and Paraguay are examples of LLDCs that have used close regional integration to enhance their ability to overcome geographic limitations. The membership of these two countries in the Southern Common Market (MERCOSUR) significantly reduces the negative implications of distance from sea. The establishment of regional transport corridors and the adoption of common rules of standards can play a major role in advancing such initiatives.³¹ The proposal for a new trans-Andean rail line to provide land-locked Paraguay and Bolivia with access to the Pacific Ocean, and in the process facilitate the movement of goods within MERCOSUR, is a case in point.³² A critical condition for the success of such initiatives is the elimination of all barriers to the free flow of goods and factors of production between the relevant countries.

In one respect the geographic disadvantage of LLDCs can be an advantage once they are part of a regional integration agreement: their land-locked position often implies that they are located at the centre of a region. For example, Uzbekistan is centrally located in the Central Asia region; Paraguay is similarly located in Central America; Ethiopia's position could enable investors to use it as a location from which to serve both North and East Africa; and Uganda's central location gives easy access to the East African countries. Their central regional location gives these countries a natural advantage in becoming the hub of regional activity and the natural centre from which to serve the entire region. The Government of Uzbekistan (a doubly land-locked country) has emphasized its geographic position between the West and the East as an advantage, implying that it enhances investors' ability to serve both markets and to benefit from trade linkages between them.

2. Country-level policy options

While the LLDCs share the common attribute of geographic location distant and separated from sea and ports, they vary considerably in a number of other important aspects. These differences must be taken into account for purposes of policy formulation. To some extent, the best way to overcome their geography-based disadvantage differs from country to country, reflecting their differing individual competitive and comparative advantages and the need for customized policy responses.

Some LLDCs may derive a strong advantage from being neighbours of highly attractive markets. For example, in Asia, Bhutan neighbours India; Nepal is

Box 3. LLDCs AND INTRA-REGIONAL FDI: BOLIVIA, PARAGUAY AND THE BENEFITS OF REGIONAL INTEGRATION IN LATIN AMERICA

Membership in regional trade agreements eliminates the consequences of distance from the sea by opening up markets in neighbouring countries. There are two major aspects to this. The first is that distance to the sea is less important, as the major trading partners are neighbouring countries. The second is that TNCs regard such countries as part of a region, and thus the distance of individual countries from the sea is less critical. Indeed, it is often argued that a major reason for the economic success of the European land-locked countries, including their success in attracting FDI, is their integration within the region.

In a somewhat similar manner, Paraguay and Bolivia – the two Latin American LLDCs – appear to perform far better than many other LLDCs as hosts for FDI, presumably at least in part owing to their membership in a number of thriving regional trade agreements. The annual average per-capita FDI these countries received during the 1990s was \$67.3 and \$28.3 for Bolivia and Paraguay respectively, compared with an average of \$12.6 to all LLDCs.

Bolivia belongs to the Association of Latin American Integration and the Andean Community. It also has a free trade agreement with Mexico, an Agreement of Economic Complementarity with Chile, and a Free Trade Zone with MERCOSUR, and it benefits from the Generalized System of Preferences of the European Union and from the North American Andean Trade Preferential Agreement. These agreements allow Bolivia to enter those markets with important tariff preferences. Paraguay is a member of MERCOSUR and has a special status with the Andean Community. As members of a common market, the countries also have some negotiating power with other trading blocs, notably with Free Trade Area of the Americas.

Indeed, in 2000, almost half the FDI stock in Paraguay originated from neighboring Latin American countries. About 20 per cent was from Argentina and 15 per cent from Brazil; Other regional investors include Colombia, Chile, Mexico and Uruguay. Bolivia is in a similar situation. The success of MERCOSUR in attracting FDI in the 1990s was largely attributed to the abolition of all trade barriers between member countries. This enabled TNCs to form regional production networks in the region. The significant growth of export-oriented investment, integrating as it does the Latin American affiliates into regional production networks, is yet another indication of this strategy adopted by major TNCs in the region. During the 1990s, regional trade within MERCOSUR accounted for about one quarter of the member countries' total trade. Significant portions of this trade are intra-firm trade controlled by TNCs, which shows the extent to which TNCs establish integrated production networks in the region.

Such are the implications for LLDCs of becoming part of a regional agreement that Paraguay's location was recently highlighted as one of its major attractions for FDI. Although the country is far from the sea, it is located at the centre of Latin America and MERCOSUR.

The lesson here for other LLDCs is that efforts to strengthen economic relationships with neighboring countries may well remedy at least some of the consequences of being

Box 3 (cont'd)

landlocked. This appears to be a particularly attractive policy route in Africa, given the region's large number of LLDCs, some of which neighbor each other. Some African LLDCs are members of a number of regional and sub-regional agreements (e.g. ECCAS (Economic Community of Central African States); ECOWAS (Economic Community of West African States); IGAD (Inter-Government Authority of the Greater Horn of Africa)), but so far none of these has created economic benefits similar to those of the Latin American agreements.¹ As Latin America's experience suggests, establishing real regional integration is a long and arduous process whose benefits often take decades to materialize.

Source: UNCTAD.

¹ It is estimated that in the early 1990s intra-regional trade accounted for only 4 per cent of total trade in Africa, compared with 44 per cent in East Asia and 30 per cent in Latin America.

located between China and India; the Lao People's Democratic Republic neighbours China; and Kazakhstan and Mongolia are between China and Russia. In Africa, Botswana and Lesotho neighbour South Africa. LLDCs located next to attractive markets can benefit from their location in two ways.

First, they can seek to attract investment that will serve the large, attractive markets from locations within their economies. For example, such were the benefits of neighbouring South Africa for Lesotho and Swaziland that in the apartheid years of the late 1980s and early 1990s, most of the investment in these two countries was by investors wishing to serve the large market of South Africa while circumventing economic sanctions.³³ Lesotho and Swaziland have continued to benefit, as many investors have maintained their operations in these countries and continue to reinvest their earnings there. Reinvested earnings accounted for about 90 per cent of total FDI inflow to Swaziland in the mid-1990s. As the South African economy improves, these neighbouring countries stand to benefit considerably from increased demand for their exports. About 75 per cent of Swaziland's export is directed to South Africa, much of it by TNCs using Swaziland as a platform from which to serve the growing South African market.³⁴ Similarly, a number of automotive TNCs (e.g. Volvo and Hyundai) established manufacturing operations in Botswana during the 1990s in order to serve the South African market.³⁵ However, for these benefits to materialize, these LLDCs must offer investors location advantages that are superior in some ways to those of neighbouring countries, and must eliminate all trade barriers between them. The first condition may not always be possible or easy to achieve, as neighbouring countries often have similar economic structures and offer similar location advantages.

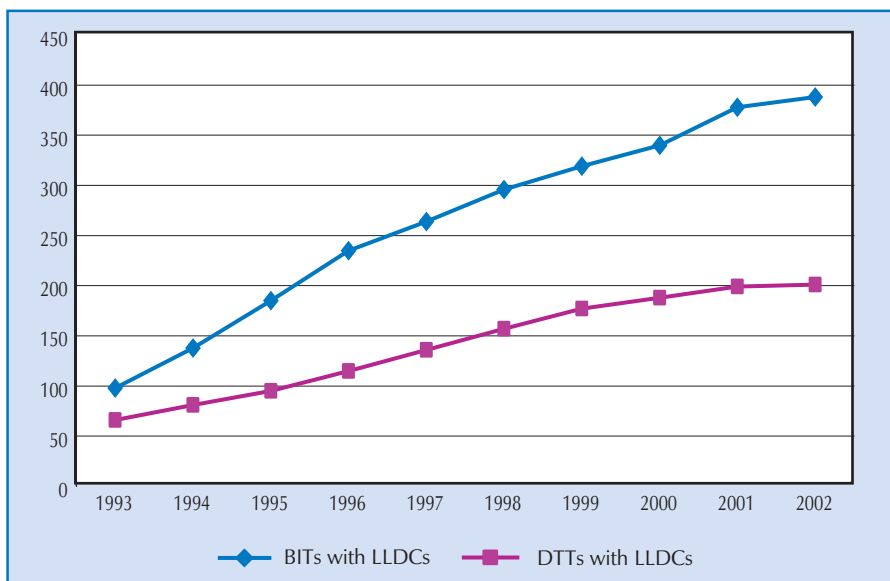
The second way in which LLDCs with attractive neighbours can benefit is by facilitating FDI from the latter. For example, by far the largest share of foreign investment in Nepal is from neighbouring India. In 1999, over a third of Nepal's \$14 billion stock of FDI originated in India. In 1999, over a third of Nepal's \$14 billion stock of FDI originated from India. Investment from Asia as a whole accounts for about half of Nepal's FDI stock. Nepal has a special relationship with India, which is also its largest trading partner, a fact that further facilitates these FDI flows. The Nepalese rupee is pegged against the Indian rupee, reflecting the high degree of integration between the two economies.³⁶ Botswana provides another example. About 80 per cent of the FDI that Botswana received in the late 1990s was from neighbouring South Africa, with which Botswana has close economic relationships.³⁷ South Africa is also the single largest investor in neighbouring Zimbabwe and accounted for about 20 per cent of the FDI inflows that Zimbabwe received in the late 1990s.

A category of investors for which LLDCs with large neighbours may be particularly attractive is TNCs seeking to customize their offerings (e.g. software products, websites) for large countries. For example, Bolivia could be a customization site for Latin America, or Afghanistan for the Economic Cooperation Organization region.

While some LLDCs are small, others are of significant size, with populations exceeding 20 million. Such countries may want to target investment seeking to serve the local market, which can benefit from the natural barriers to competition with foreign exports created by distance and transport costs. In such cases, their geographic location becomes an advantage rather than a disadvantage in attracting FDI. A survey of Indian TNCs operating in Nepal undertaken in the early 1990s³⁸ revealed that the overwhelming majority of this investment was directed to the Nepalese market, while only 14 per cent had been undertaken with a view to exporting the output to markets elsewhere. Another 14 per cent was undertaken for both reasons (i.e. market and export seeking). Likewise, in a survey of more than 400 investors in sub-Saharan Africa, the attraction of servicing the local market was ranked as the first motivation for investment in Ethiopia and Uganda.³⁹ However, given the low purchasing power of many of the larger LLDCs, initiatives for promoting such investments should be carefully conceived, directing FDI to those areas where the purchasing power of the population creates local demand that is large enough to support these activities.

Some LLDCs enjoy favourable trade access from some developed countries because of past historical ties. (Examples are the Lomé Convention and its successor, the Cotonou Agreements between the African, Caribbean and Pacific Group of States and the European Community.) This makes them attractive locations for certain types of export-oriented FDI, notably relating to products with low transport costs. Indeed, some LLDCs have been most successful in this direction. For example, more than 90 per cent of FDI to Lesotho involves export-oriented manufacturing. A special opportunity is currently opening up for some African LLDCs, which are able to capitalize on the advantages offered by the African Growth and Opportunity Act (AGOA), passed by the US Congress in 2000.⁴⁰ According to this agreement, until 2008, thirty-three African countries, many of which are LLDCs, will export most goods to the United States duty free. The agreement is expected to have such a great impact that the president of Uganda referred to it as “the biggest event after independence”. The agreement increases the attractiveness of these countries as locations for export-oriented FDI that is directed to sales in the United States, including by US TNCs seeking low-cost production locations for output to sell back home.

CHART 4. BITs AND DTTs IN LLDCs



Source: UNCTAD BIT and DTT databases.

Notwithstanding these various options for consideration by LLDCs, success in attracting investment of any kind requires FDI policy that establishes a favourable investment environment. Most LLDCs have made major progress in this area in the last decade or so. Chart 4 and Table 8 provide some indicators concerning the national FDI policies of the LLDCs. As Chart 4 suggests, the activity of LLDCs in the area of bilateral investment treaties (BITs) in the 1990s was only slightly lower than that of LDCs in general. However, in terms of DTTs (bilateral treaties for avoiding double taxation), LLDCs lag far behind. Table 8 shows that LLDCs have also been active signatories to the main international investment-related instruments, and their activity in this area is on par with that of other developing countries, including LDCs.⁴¹

III. INTERNATIONAL SUPPORT MEASURES

While landlocked and transit developing countries bear the primary responsibility for implementing measures designed to strengthen their cooperative and collaborative efforts, the international community, including financial and development institutions, should provide more support to enable these countries to deal effectively with their transit transport problems and requirements. Sixteen of the LLDCs are also classified by the United Nations as LDCs, and since most transit countries are themselves developing countries facing serious economic problems, financial assistance from the international community is critical for the development and maintenance of physical infrastructure. There is, therefore, a need to reverse the decline in external financing, especially official development assistance, and encourage greater private-sector investments and managerial resources.

Since purely private financing schemes may not be feasible in many landlocked and transit developing countries, the international community is invited to also support new modalities of financing, such as the following:

- **Regional venture funds** use grants from multilateral organizations to pay development and management fees for selected countries or projects and to help promote interest in riskier infrastructure projects by reducing development risk.
- **Equity participation in local financial institutions** occurs when a foreign institution purchases shares in a selected bank that lends to small infrastructure projects.

- **Co-financing** involves parallel loans to an infrastructure project by a multilateral financial institution and the local bank.
- **Bank-to-bank loans** involve a foreign institution's making a long-term loan to a local bank for forward lending to small infrastructure projects.

The international community, including donor countries and financial and development institutions, should strengthen its support for technical cooperation programmes in the transit transport sector that are designed to improve the human and technological capacity of landlocked and transit developing countries. UNCTAD's technical cooperation programmes, including ASYCUDA and the Advance Cargo Information System (ACIS), which have made important contributions to the improvement of transit transport in landlocked developing countries and their transit neighbours, should continue to give priority to this group of countries, particularly to regions that have not yet benefited from such programmes.

International trade: In the Millennium Declaration, the Heads of State and Government committed themselves "to an open, equitable, rule-based, predictable and non-discriminatory multilateral trading and financial system." It is incumbent on the international community to promote this development objective in the context of the Doha Work Programme to achieve development results that are economically meaningful, including in areas of concern to LLDCs and transit developing countries.

Commodities: At the international level, a concerted effort by LLDC Governments, in partnership with relevant UN agencies, multilateral financial institutions, and the donor community, could launch a long-term holistic programme targeting LLDCs and their trade corridors partners to address bottlenecks in trade logistics channels and to facilitate regional cooperation to harmonize management systems, procedures (customs, trade, banking, insurance) and policies. Particular attention could be paid to the specificity of existing export commodities in terms of the conditions to be met in the medium term to increase exports of greater-value-added agrofood products, agricultural raw materials, and minerals and metals at competitive and fair prices.

Competition policy: International support for LLDCs and transit developing countries in competition matters should involve creating appropriate frameworks for dialogue, as well as complementarities and interaction, relating to the following:

- Technical assistance to maximize the role of competition policy in granting of business licences, privatization, competitive tendering, and granting of concessions relating to infrastructure, taking into account efficiency factors
- Technical assistance relating to the drafting and enforcement of competition legislation or sectoral regulation, as well as institution-building
- Strengthened international cooperation where the importing or exporting costs or other difficulties of LLDCs may be increased by insufficient or inappropriate competition policy action by transit countries or trading partners

Trade and environment: Developed countries and international organizations should thus integrate into their capacity-building programmes specific elements to assist LLDCs in developing environmental policies adapted to national conditions; adopting environmentally sound production methods; and acquiring the technologies and infrastructure required to prevent and reduce pollution as well as increase efficient consumption of natural resources and reduce desertification. Strengthening international cooperation, including through financial assistance, enhanced foreign investment and integrated export promotion strategies, is critical for LLDCs' sustained economic development.

The international community should acknowledge the specific needs of LLDCs and provide them with assistance designed to overcome the disadvantages associated with their geographic position. Such assistance should focus on two major areas:

- Development of telecommunications infrastructures enabling LLDCs to participate in the emerging global knowledge economy and attract FDI to foster activities that are not sensitive to distance. Indeed, a number of international organizations (e.g. ITU, UNDP and the World Bank) are already taking steps to help developing countries build strong information technology sectors. Given the importance of such developments, the international community should give greater support to LLDCs.
- Strengthening of regional integration groupings where participating LLDCs could market their products and services. Efforts are needed at the international and regional level to accelerate the pace of such developments as well as the number of countries taking part in them.

Notes

- 1 Afghanistan, Armenia, Azerbaijan, Bhutan, Bolivia, Botswana, Burkina Faso, Burundi, the Central African Republic, Chad, Ethiopia, Kazakhstan, Kyrgyzstan, the Lao People's Democratic Republic, Lesotho, The former Yugoslav Republic of Macedonia, Malawi, Mali, Mongolia, Nepal, Niger, Paraguay, Rwanda, Swaziland, Tajikistan, Turkmenistan, Uganda, Uzbekistan, Zambia and Zimbabwe.
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TABLE 1. EXPORT VALUE AND PURCHASING POWER OF LLDC EXPORTS

Country	Exports in 2000			Annual average growth rates (%) of:											
	Total	Per capita	\$	Export value		Purchasing power of exports		Purchasing power of exports per capita							
	(millions)	% of GDP		1980-1990	1990-2000	1998-1999	1999-2000	1980-1990	1990-2000	1998-1999	1999-2000				
Afghanistan	133	1.1	6	-10.5	-4.7	-19.8	21.3	-12.0	-3.9	-11.3	17.3	-10.8	-8.3	-13.1	14.3
Armenia	294	15.4	78	..	..	5.3	26.7	..	..	..	..	..	..	..	..
Azerbaijan	1 745	33.1	217	..	..	53.3	87.7	..	..	..	..	..	..	..	..
Bhutan	140	28.7	233	19.6	8.5	7.3	20.8	..	..	..	..	..	..	..	..
Bolivia	1 230	14.8	148	-1.9	4.3	-4.8	17.0	-2.8	3.6	-1.4	14.7	-4.8	1.2	-3.6	12.1
Botswana	2 712	51.3	1 759	18.8	4.9	28.5	2.6	15.6 ^a	5.9	32.8	7.2	4.5	10.1	31.0	6.1
Burkina Faso	213	9.7	18	7.9	12.8	20.1	-16.4	7.3	12.8	-19.9	-19.2	4.5	10.1	-21.8	-21.2
Burundi	50	7.3	8	2.5	-4.3	-15.8	-7.9	1.2	6.8	26.2	4.2	-1.9	5.7	25.0	2.6
Central African Republic	152	15.8	41	3.6	2.8	-3.3	9.7	0.1	7.0	-2.1	23.0	-2.3	4.5	-4.0	20.8
Chad	193	13.7	24	9.4	2.8	-23.0	-4.4	7.7	-1.6	-18.9	8.3	5.0	-4.5	-21.4	4.9
Ethiopia	486	7.6	8	-1.1	11.5	-16.6	4.0	-1.4 ^b	5.9	-13.3	5.8	-4.4 ^b	3.0	-15.4	3.3
Kazakhstan	9 126	50.1	564	..	..	3.0	63.0	..	..	..	..	..	..	..	..
Kyrgyzstan	504	38.7	103	..	..	-11.6	11.2	..	..	..	..	..	..	..	..
Lao People's Dem. Republic	330	19.3	63	11.0	15.4	-15.9	6.3	..	..	..	..	..	..	..	..
Lesotho	221	24.5	108	3.7	12.5	-11.0	28.0	3.7	12.9	-12.4	30.7	1.6	10.8	-13.8	29.0
Malawi	355	20.9	31	2.0	1.0	-14.0	-19.7	-1.3	-0.8	-14.7	-22.2	-5.6	-2.5	-17.0	-24.1
Mali	545	23.7	48	6.0	6.9	2.7	-4.5	6.3	8.5	-2.2	6.6	3.7	5.8	-4.8	3.7
Mongolia	443	45.7	175	5.0	-1.7	-1.4	30.1	0.9	..	..	..	-2.0	..	..	..
Nepal	804	14.6	35	8.1	10.7	27.0	33.7	..	..	..	..	..	..	..	..
Niger	283	15.5	26	-5.4	0.0	-14.1	-1.3	-7.1	-2.7	-16.0	5.0	-10.0	-5.9	-18.9	1.4
Paraguay	869	11.6	158	11.6	1.7	-26.9	17.3	18.1	0.3	-25.0	14.0	14.6	-2.3	-27.0	11.1
Rwanda	53	2.9	7	-0.3	-3.5	0.7	-12.6	-1.2	-0.6	-4.4	-15.9	-4.1	-1.8	-13.4	-21.7
Swaziland	851	57.6	920	4.7	5.8	-10.3	-6.8	9.5	3.8	-8.3	-5.7	6.0	1.9	-10.2	-7.3
Tajikistan	779	78.6	128	..	..	14.5	13.1	..	..	..	..	..	..	..	..
The former Yugoslav Republic of Macedonia	1 319	36.9	648	..	..	-9.1	10.7	..	..	..	..	..	..	..	..
Turkmenistan	2 506	56.9	529	..	..	99.8	111.1	..	..	..	..	..	..	..	..
Uganda	461	7.5	20	-4.0	15.4	3.5	-11.2	-13.7	19.3	38.1	-12.0	-16.5	15.8	34.0	-14.6
Uzbekistan	3 265	42.6	131	..	..	-9.0	11.5	..	..	..	..	..	..	..	..
Zambia	770	26.4	74	0.9	-2.0	-12.4	-14.0	3.0	0.7	-12.2	-11.0	-0.2	-1.9	-14.3	-13.0
Zimbabwe	1 954	26.4	155	2.9	2.7	9.1	3.5	6.9	7.8	32.0	-8.3	3.1	5.6	29.6	-9.9
Landlocked countries	32 786	26.7	101	3.4	11.7	2.4	26.2	..	..	..	..	..	..	..	..
Developing countries	2 026 154	31.6	436	3.2	9.1	8.6	23.4	1.8	7.9	9.4	16.6	-0.2	6.1	7.6	14.8

Source: UNCTAD secretariat calculations based on UNCTAD Handbook of Statistics 2002.

Notes: a 1982-90; b 1981-90.

TABLE 2. VALUE AND VOLUME OF LLDC IMPORTS

Country	Imports in 2000			Annual average growth rates (%) of:						Import volume per capita					
	Total	Per capita	\$	Import value		Import volume		Import volume		1980-1990		1990-2000		1999-2000	
	(millions)	% of GDP	(millions)	1980-1990	1990-2000	1999-2000	1980-1990	1990-2000	1999-2000	1980-1990	1990-2000	1999-2000	1980-1990	1990-2000	1999-2000
Afghanistan	636	5.4	29	-0.1	-1.1	3.1	30.6	-1.8	-0.2	14.1	26.4	-0.5	-4.8	11.8	23.1
Armenia	882	46.1	233		-11.4	10.3									
Azerbaijan	1 172	22.3	146		-3.9	13.2									
Bhutan	180	36.9	299	5.6	7.3	36.1	-1.3								
Bolivia	1 830	22.1	220	-0.3	9.7	4.3	-5.8	-1.2	9.0	-8.3	2.3	-3.2	6.5	-10.4	0.0
Botswana	2 469	46.7	602	9.0	2.7	11.5	-7.8	9.1 ^a	3.7	-4.1	16.6	5.8 ^a	1.4	-5.4	15.3
Burkina Faso	550	25.1	48	4.3	2.5	-20.9	-5.0	3.7	2.5	-20.6	-8.1	1.1	0.0	-22.5	-10.4
Burundi	148	21.5	23	2.2	-6.9	25.2	-5.8	1.0	4.0	12.4	41.8	-2.2	2.8	11.3	39.5
Central African Republic	140	14.5	38	7.9	1.9	-1.1	-9.4	4.2	6.0	0.2	1.7	1.7	3.6	-1.8	-0.2
Chad	323	22.9	41	12.6	4.0	-11.3	2.2	10.8	-0.4	-6.6	15.8	8.0	-3.4	-9.5	12.2
Ethiopia	1 343	21.0	21	4.3	7.9	-15.4	1.9	3.6 ^b	2.6	-12.0	3.7	0.5 ^b	-0.3	-14.2	1.2
Kazakhstan	5 051	27.7	312			37.0	26.0								
Kyrgyzstan	554	42.5	113			-28.7	-7.6								
Lao People's Democratic Rep.	535	31.3	101	6.6	12.7	2.0	2.9								
Lesotho	728	80.9	358	3.5	0.6	-9.5	-6.9	3.5	1.0	-10.9	-4.9	1.3	-0.9	-12.3	-6.2
Malawi	569	33.5	50	3.3	0.1	20.5	-18.5	-0.1	-1.7	19.5	-21.0	-4.4	-3.3	16.4	-23.0
Mali	592	25.8	52	4.3	1.7	8.5	-27.8	4.6	3.2	3.3	-19.3	2.0	0.6	0.5	-21.5
Mongolia	615	63.4	243	5.0	0.8	1.9	19.8	0.9				-2.0			
Nepal	1 573	28.6	68	6.9	9.3	10.6	-6.4								
Niger	372	20.4	34	-3.5	0.0	7.2	-8.0	-5.2	-2.7	4.8	-2.1	-8.2	-6.0	1.2	-5.5
Paraguay	2 050	27.3	373	4.2	5.5	-30.2	18.9	10.4	4.0	-28.4	15.4	7.1	1.3	-30.2	12.5
Rwanda	213	11.9	28	3.3	-1.2	-11.4	-15.7	2.4	1.8	-15.9	-18.9	-0.7	0.6	-23.8	-24.5
Swaziland	921	62.3	996	-0.5	4.3	-7.0	-9.6	4.1	2.3	-5.0	-8.5	0.8	0.5	-6.9	-10.0
Tajikistan	674	68.0	111			1.6	16.4								
The former Yugoslav Republic of Macedonia	2 085	58.4	1 025			-6.2	16.1								
Turkmenistan	1 785	40.5	377			46.6	20.8								
Uganda	1 516	24.6	65	4.5	21.3	-5.2	13.0	-6.1	25.4	26.5	11.9	-9.1	21.7	22.8	8.6
Uzbekistan	2 947	38.4	118			3.7	3.8								
Zambia	976	33.5	94	0.0	-1.6	9.5	34.3	2.1	1.1	9.7	39.0	-1.1	-1.5	7.1	35.9
Zimbabwe	1 428	19.3	113	-0.5	0.0	0.0	-35.0	3.4	4.9	21.0	-42.4	-0.3	2.8	18.7	-43.4
Landlocked countries	34 857	28.4	108	3.0	9.5	-7.0	7.4								
Developing countries	1 890 780	29.4	391	4.3	8.3	4.0	19.0	3.1	7.2	5.2	13.1	1.0	5.4	3.5	11.8

Source: UNCTAD secretariat calculations based on UNCTAD Handbook of Statistics 2002.

Notes: a 1982-90; b 1981-90.

TABLE 3. LLDCs' EXPORT STRUCTURE RANKED BY 1999 VALUES

Country	SITC ^a	Three leading commodities	As % of
Armenia	667	Pearls, other precious and semi-precious stones	36.4
	351	Electric current	8.3
	288	Nonferrous base metal waste and scrap	5.6
Azerbaijan	333	Petroleum oils, crude oils	42.6
	334	Petroleum products	32.8
	351	Electric current	2.8
Bhutan	351	Electric current	40.5
	671	Pig iron, etc.	10.8
	661	Lime, cement and building products	10.8
Bolivia	792	Aircraft and parts, etc.	20.1
	287	Ores and concentrates of base metals n.e.s.	11.9
	081	Animal feed	8.2
Burkina Faso	263	Cotton	66.0
	001	Live animals for food	9.7
	222	Seed for soft fixed oil	2.4
Burundi	071	Coffee and substitutes	66.6
	971	Gold, non-monetary n.e.s.	28.4
	074	Tea and mate	1.9
Ethiopia	071	Coffee and substitutes	60.0
	292	Crude vegetable material n.e.s.	15.2
	611	Leather	5.9
Kazakhstan	333	Petroleum oils, crude oils	36.5
	682	Copper	9.7
	041	Wheat and meslin, unmilled	4.8
Kyrgyzstan	931	Special transactions	40.3
	351	Electric current	11.5
	121	Tobacco (unmanufactured), tobacco refuse	9.3
Nepal	659	Floor coverings, etc.	27.9
	843	Women's outer garments, of textile fabrics	11.1
	431	Processed animal and vegetable oils	9.3
Paraguay	222	Seeds for soft fixed oil	42.2
	263	Cotton	8.4
	081	Animal feed	7.8
Rwanda	071	Coffee and substitutes	53.1
	074	Tea and mate	25.7
	287	Ores and concentrates of base metals n.e.s.	11.3
The former Yug. Rep. of Macedonia	843	Outer garments, women's, textiles fabrics	10.1
	674	Universals, plates and sheets, iron or steel	7.8
	121	Tobacco (unmanufactured), tobacco refuse	6.5
Turkmenistan	341	Gas, natural and manufactured	32.9
	263	Cotton	18.1
	334	Petroleum products, refined	17.8
Uganda	071	Coffee and substitutes	56.9
	291	Crude animal materials n.e.s.	8.1
	971	Gold (non-monetary) n.e.s.	6.6
Zambia	682	Copper	41.8
	689	Miscellaneous non-ferrous base metals	10.1
	287	Ores and concentrates of base metals n.e.s.	9.9
Zimbabwe	121	Tobacco (unmanufactured), tobacco refuse	33.4
	671	Pig iron, etc.	6.8
	263	Cotton	5.8

Source: UNCTAD secretariat calculations based on UN COMTRADE database.

Note: Standard International Trade Classification. Data are not available for Afghanistan, Botswana, the Central African Republic, Chad, the Lao People's Democratic Republic, Lesotho, Malawi, Mali, Mongolia, Niger, Swaziland, Tajikistan or Uzbekistan.

TABLE 4. LLDCs' FREIGHT AND INSURANCE COSTS AS A PROPORTION OF TOTAL EXPORTS OF GOODS AND SERVICES, 2000 (OR LATEST YEAR AVAILABLE)

Country	Transportation and insurance payments (US\$ millions) (1)	Export of goods and services (US\$ millions) (2)	Ratio (%) (1)/(2)
Afghanistan	..	..	..
Armenia	126.1	446.9	28.2
Azerbaijan	144.1	2 118.1	6.8
Bhutan	..	..	..
Bolivia	331.8	1 470.1	22.6
Botswana ^a	233.9	3 043.7	7.7
Burkina Faso ^b	70.4	271.9	25.9
Burundi	19.6	55.2	35.5
Central African Republic ^b	58.7	179.0	32.8
Chad ^b	98.5	190.1	51.8
Ethiopia	302.3	992.2	30.5
Kazakhstan	523.4	10 421.4	5.0
Kyrgyzstan	78.0	572.7	13.6
Lao People's Democratic Rep.	4.9	506.0	1.0
Lesotho	31.5	253.8	12.4
Malawi ^b	213.7	384.8	55.5
Mali ^c	229.0	643.6	35.6
Mongolia	85.9	613.5	14.0
Nepal	64.8	1 282.1	5.1
Niger ^d	92.5	321.3	28.8
Paraguay	287.9	2 844.3	10.1
Rwanda	83.6	109.7	76.2
Swaziland	33.9	1 012.4	3.3
Tajikistan	..	..	..
The former Yug. Rep. of Macedonia	222.2	1 620.2	13.7
Turkmenistan ^c	164.9	1 045.9	15.8
Uganda	164.1	663.1	24.7
Uzbekistan	..	..	..
Zambia	227.5	871.1	26.1
Zimbabwe ^b	379.3	2 344.3	16.2
LLDCs ^e	3 118.2	24 134.9	12.9
Developing countries ^e	108 051.9	1 332 792.5	8.1
Developed countries ^e	274 288.4	4 729 183.8	5.8

Source: UNCTAD calculations based on IMF *Balance of Payments Statistics 2002*.

Notes: a 1999; b 1994; c 1997; d 1995; e 1998.

TABLE 5. FREIGHT AND INSURANCE AS A PERCENTAGE OF C.I.F. IMPORT VALUES FOR SELECTED GROUPS OF COUNTRIES

	1985	1990	1995	1999	2000
World	4.2	3.7	3.8	3.5	3.5
Developed market economy	3.5	3.0	3.0	3.0	3.0
Developing countries	6.9	6.4	6.3	5.4	5.3
<i>Of which:</i>					
Africa	10.1	9.7	9.8	8.9	10.1
America	4.9	5.1	5.2	4.5	4.4
Asia	6.9	6.2	6.3	5.5	5.4
Oceania and Europe	10.1	11.6	4.4	4.7	3.8
Landlocked developing countries	13.3	14.2	7.4	..	..
<i>Of which:</i>					
Africa					
East Africa ^a	16.7	18.7	13.5	11.2	11.2
Southern Africa ^b	8.5	8.4	6.7	6.5	7.1
West Africa ^c	26.3	27.4	19.7	..	..
Asia					
Central Asia ^d	..	..	7.2	8.0	8.3
Other Asia ^e	2.4	8.3	6.9	3.9	4.8
Latin America ^f	13.7	15.0	14.2	12.1	9.8

Source: UNCTAD secretariat calculations based on UNCTAD *Handbook of Statistics 2002* and IMF *Balance of Payments 2002*.

Notes: *a* Burundi, Ethiopia, Rwanda and Uganda.

b Botswana, Lesotho, Swaziland and Zambia.

c Burkina Faso, Central African Republic, Chad, Mali and Niger.

d Armenia, Azerbaijan, Kazakhstan and Kyrgyzstan (data available as of 1995).

e Mongolia and Nepal.

f Bolivia and Paraguay.

**TABLE 6. INTRA-TRADE OF LLDCs, 2000 AND 2001:
PROPORTION OF TOTAL EXPORTS AND IMPORTS WHOSE DESTINATION OR
SOURCE IS DEVELOPING COUNTRIES ON THE SAME CONTINENT**

(Percentage)

	Exports		Imports	
	2000	2001	2000	2001
Afganistán	48.3	57.8	68.9	72.9
Armenia	21.0	25.4	23.9	30.7
Azerbaijan	14.2	10.4	30.2	39.6
Bhutan	..	..	..	..
Bolivia	44.5	58.7	51.4	56.2
Botswana	..	..	..	..
Burkina Faso	14.4	18.8	38.0	41.5
Burundi	16.9	16.4	20.7	22.1
Central African Republic	1.5	2.3	22.1	20.6
Chad	9.9	13.7	31.3	14.3
Ethiopia	17.0	21.2	2.0	2.3
Kazakhstan	16.5	17.8	12.9	15.1
Kyrgyzstan	41.0	43.1	45.5	57.2
Lao People's Democratic Republic	57.2	59.1	88.6	91.2
Lesotho	..	..	..	..
Malawi	5.7	5.1	27.7	24.3
Mali	9.2	12.4	22.0	21.6
Mongolia	50.4	50.9	41.4	42.5
Nepal	30.4	34.9	72.4	71.3
Niger	48.9	42.5	36.8	36.7
Paraguay	74.9	72.3	58.1	64.0
Rwanda	2.4	2.0	30.6	31.0
Swaziland	..	..	..	..
Tajikistan	25.7	34.0	58.8	59.9
The former Yug. Rep. of Macedonia	32.6	36.0	30.0	31.6
Turkmenistán	25.9	54.8	37.2	35.6
Uganda	5.9	6.6	48.0	49.2
Uzbekistán	18.5	18.3	27.7	28.9
Zambia	17.2	15.2	12.2	7.5
Zimbabwe	9.6	3.4	10.7	15.4

Source: UNCTAD *Handbook of Statistics 2002* and IMF *Direction of Trade 2002*.

**TABLE 7. FDI IN LLDCs IN COMPARISON WITH SIDS, LDCs,
OTHER DEVELOPING COUNTRIES, DEVELOPED COUNTRIES,
AND THE WORLD AS A WHOLE**

(Group averages)

Country groups	FDI inflows as % of gross fixed capital formation, 2001	FDI inflows, per capita dollars (average 1992–2001)	FDI inflows (\$ millions)		FDI inflows, annual average growth (%), 1996–2001	FDI inward stock (\$ millions), 2001	UNCTAD Indices,* 1999–2001	
			<i>Average 1995–2000</i>	<i>Average 2001</i>			<i>Potential**</i>	<i>Performance (value)</i>
LLDCs	24.5	13	4,647	5,511	-1.6	41,563	0.113	1.189
SIDS	31.0	254	14,415	12,658	-3.4	152,604	0.201	2.193
LDCs	6.8	5	3,611	4,645	8.3	41,513	0.099	0.663
Other developing countries	12.0	36	164,346	184,459	8.0	1,932,052	0.188	0.893
Developed countries	11.0	488	541,757	509,760	30.5	4,504,121	0.388	0.998
World	11.4	100	747,939	740,232	22.6	6,816,849	n.a.	1.000

Source: UNCTAD database.

* The Inward FDI Performance Index is defined as the ratio of a country's share in global FDI flows to its share in global GDP. The Inward FDI Potential Index is constructed as the unweighted average of the normalized values of thirteen variables: rate of GDP growth, share of exports in GDP, telephone lines per 1,000 inhabitants, commercial energy use per capita, share of R&D expenditures in gross national income, share of tertiary students in the population, political and commercial country risk, share in global exports in natural resources, share in global imports of parts and accessories in electronics and in automobiles, share in global exports in services, share in global FDI inward stocks, and the share in global privatized M&A deals. Neither of the two indices is intended to provide a comprehensive model explaining the locational decisions of TNCs or to measure the impact of FDI on host economies. The averages presented in this table cover 140 countries for which data for both indices are available.

** Scores can range from 0 to 1.

TABLE 8. LLDCs SIGNATORIES TO MAIN INTERNATIONAL INVESTMENT-RELATED INSTRUMENTS

(As of March 2003)

Country	CREFAA ^a	ICSID ^b	MIGA ^c	TRIMs ^d	GATS ^e	TRIPS ^f
Afghanistan		✓	g			
Armenia	✓	✓	✓	✓	✓	✓
Azerbaijan	✓	✓	✓	h	h	h
Bhutan				h	h	h
Bolivia	✓	✓	✓	✓	✓	✓
Botswana	✓	✓	✓	✓	✓	✓
Burkina Faso	✓	✓	✓	✓	✓	✓
Burundi		✓	✓	✓	✓	✓
Central African Republic	✓	✓	✓	✓	✓	✓
Chad		✓	✓	✓	✓	✓
Ethiopia		i	✓	h	h	h
Kazakhstan	✓	✓	✓	h	h	h
Kyrgyzstan	✓	✓	✓	✓	✓	✓
Lao People's Dem. Rep.	✓		✓	h	h	h
Lesotho	✓	✓	✓	✓	✓	✓
Malawi		✓	✓	✓	✓	✓
Mali	✓	✓	✓	✓	✓	✓
Mongolia	✓	✓	✓	✓	✓	✓
Nepal	✓	✓	✓	h	h	h
Niger	✓	✓	g	✓	✓	✓
Paraguay	✓	✓	✓	✓	✓	✓
Rwanda		✓	✓	✓	✓	✓
Swaziland		✓	✓	✓	✓	✓
Tajikistan			✓	h	h	h
The former Yug. Republic of Macedonia	✓	✓	✓	✓	✓	✓
Turkmenistan		✓	✓			
Uganda	✓	✓	✓	✓	✓	✓
Uzbekistan	✓	✓	✓	h	h	h
Zambia	✓	✓	✓	✓	✓	✓
Zimbabwe	✓	✓	✓	✓	✓	✓

Source: UNCTAD.

a Convention on the Recognition and Enforcement of Foreign Arbitral Awards.

b Convention on the Settlement of Investment Disputes between States and Nationals of Other States.

c Convention Establishing the Multilateral Investment Guarantee Agency.

d Agreement on Trade-Related Investment Measures.

e General Agreement on Trade in Services.

f Agreement on Trade-Related Aspects of Intellectual Property Rights.

g Countries in the process of fulfilling membership requirements to MIGA.

h Observer status in the WTO.

i Signed but not ratified.