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Strengthening participation of developing countries in dynamic and new sectors of world trade: Trends, issues and policies

Background note by the UNCTAD secretariat

Executive summary

One of the main themes of the eleventh session of the United Nations Conference on Trade and Development (UNCTAD) is "Assuring development gains from international trade and trade negotiations". An important way to realize such gains, and thereby to use trade as a genuine engine of growth and development, is to promote increased and beneficial participation of developing countries in dynamic and new sectors of world trade. These sectors can provide opportunities for developing countries, including least developed countries and other commodity-dependent economies, to accelerate growth, increase domestic value added of exports, increase productivity and competitiveness, and enhance employment and quality of jobs, thereby contributing to the achievement of the objectives and goals of the United Nations Millennium Declaration.

During the last few decades, a number of developing countries have succeeded in entering these sectors, and a few have even been able to deepen their participation. Their experience, and the salience of the dynamic and new sectors for the growth and development of developing countries, raise a number of issues and questions. *What are the dynamic and new sectors in world trade? What kind of opportunities do they present in ensuring development gains from international trade? What are the key determinants of developing country participation in these sectors? What are the national and international policy imperatives to promote increased and beneficial participation of developing countries in these sectors? What role can UNCTAD play in this connection?*

This background note seeks to facilitate discussions at the UNCTAD XI thematic session on *Policy options and strategies to support developing countries' participation in the dynamic and new sectors of world trade*. Drawing upon research and analysis conducted by UNCTAD, including the recent issues of the *Trade and Development Report* and the *World Investment Report*, it traces the main trends in developing countries' export performance, analyses their participation in dynamic and new sectors of world trade, identifies the main factors affecting this process, raises broad national and international policy issues, and sets out the broad aspects of UNCTAD's work as part of sectoral trade reviews.

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Introduction

1. One of the main themes of the eleventh session of the United Nations Conference on Trade and Development (UNCTAD) is "Assuring development gains from international trade and trade negotiations". An important way to generate and capture such gains, and thereby to use trade as a genuine locomotive of growth and development, is to promote greater and beneficial participation of developing countries in dynamic and new sectors of world trade. These sectors, and products thereunder, fall into three broad categories, namely those that have displayed consistently high growth and increased share in world trade, including ones in which developing countries have already achieved some export presence; items already in existence but new on the list of export activities of developing countries; and altogether new areas of trade in which developing countries have potential comparative advantage.
2. In recent decades, a number of developing countries have succeeded in entering these sectors, with some deepening their participation and others capturing only limited gains in terms of domestic value added. Their experience points to the need for a focused policy approach, within the overall development framework, that builds and sustains strategic linkages among key factors, including supply capacity, productivity, technological endowment and competitiveness; domestic and foreign investment; market access and entry; changing demand and preferences; and regional division of labour. International trading and financial systems, global market structures and development cooperation have significant implications for the success of such efforts.
3. Beneficial participation in these sectors can provide new possibilities for developing countries, including least developed countries (LDCs) and other commodity-dependent economies, to promote capital accumulation, structural change, productivity, technological upgrading, competitiveness of domestic enterprises and employment, and, in the process, to improve overall economic performance. Successful exploitation of these opportunities can make a significant contribution to attaining the objectives and goals of the United Nations Millennium Declaration. By helping developing countries to increase their share in world trade and income, it can provide a sustained boost to the global economy and trade. Overall, it can be a win-win proposition for all countries.
4. UNCTAD, as the focal point of the United Nations for the integrated treatment of trade and the interrelated issues of finance, investment, technology and sustainable development, has an important role in policy developments to promote the participation of developing countries in dynamic and new sectors of world trade through its analytical work, intergovernmental deliberations and capacity-building support. The role of UNCTAD sectoral trade reviews will be particularly relevant in this regard.
5. This background note seeks to facilitate discussions at the UNCTAD XI thematic session on *Policy options and strategies to support developing countries in the dynamic and new sectors of world trade*, by tracing the main trends in developing countries' export performance, analysing their participation in dynamic and new sectors of world trade, identifying the main factors affecting this process, and outlining general areas of national and international policy actions. It is important to note at the outset that this note provides a broad treatment of the issue. Specific policies and actions, however, would depend on the precise sector or product concerned, the countries involved, initial conditions and a range of other factors. These factors vary among sectors and countries, and so should policies and measures in each particular case. Consideration of specific sectors, therefore, would require in-depth case-by-case consideration. Guidance by the thematic session for the UNCTAD sectoral trade reviews will be particularly useful.

I. Trends in developing country export performance

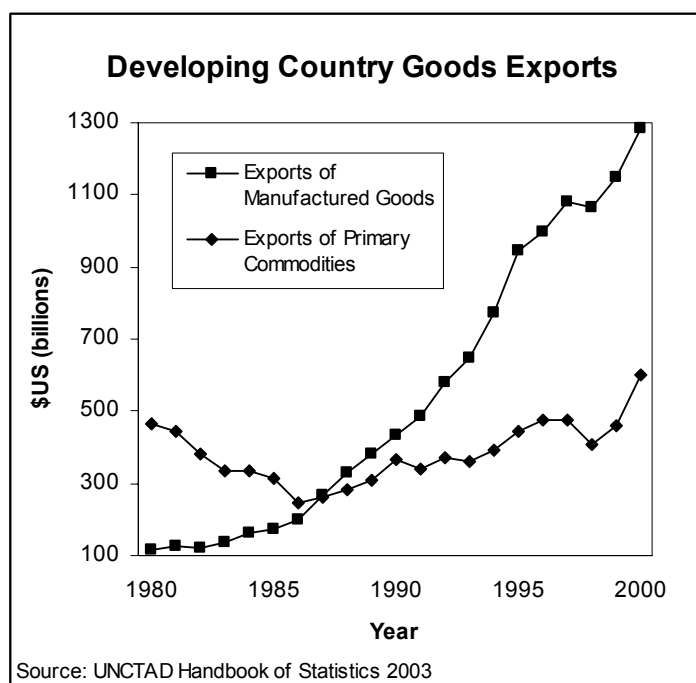
6. *Overall trends.* The growth in trade in the last 50 years has typically exceeded growth in output. This reflects a move towards more open economies, as well as continued international specialization of production. The share of developing countries in international trade increased throughout the 1970s to reach 27 per cent of world trade in 1981. In the 1980s, often called the lost decade for development as a result of the debt crisis, the developing countries' share in trade fell, but subsequently recovered to 31 per cent in 2001. Today, manufactures represent over 70 per cent of developing countries' exports of goods.

7. *Inter-country variations in trade performance.* The recovery of the share of developing countries in world trade masks important variations in country performance. On the positive side, a few developing countries, including some East Asian newly industrializing economies (NIEs), have been able to achieve substantial increases in their shares in world manufacturing value-added, which have matched or exceeded increases in their shares in world manufacturing trade. The exports concerned are often at the higher end of the value chain and many are also globally dynamic goods and services, and, together with niche products and services based on natural and cultural endowments, represent new opportunity frontiers for developing countries. Another important feature of the performance of East Asian NIEs is that they have been able to gain market shares in all markets, this fact signifying their emergence as global production bases.

8. Conversely, the share of LDCs in particular witnessed a secular decline from 1.46 per cent in 1970 to 0.25 per cent in 2001. One reason for this is the continued fall in the importance of commodities trade. While total world exports grew at an average annual rate of 6.1 per cent between 1990 and 2000, commodity exports grew by only 3.1 per cent. This is explained partly by the declining relative prices of commodities compared with those of manufactures, partly by double-counting of manufactured goods which are traded several times at different stages of processing and partly by slower overall growth in demand. Half of all developing countries depend on non-fuel commodities for more than half of their export earnings, and the proportion rises to two thirds if fuels are included. As many as 38 developing countries are dependent on a single commodity for more than half of their exports and 48 on two such items.

Box 1. Changing composition of developing country exports: A scissors pattern

An important development in world trade over the past 25 years has been the increased share of manufactured goods in the exports of developing countries relative to commodities. Accounting for only 20 per cent of their exports (\$115 billion) in 1980, the share of manufactures in developing country exports grew steadily to nearly 70 per cent (\$1,300 billion) in 2000, while annual exports of primary commodities in value terms fluctuated within a narrow range from \$250 billion to \$600 billion. The graph below captures this pattern, which looks like an open pair of scissors.



A closer look at these trends, however, would reveal that the picture is much more nuanced. Many developing countries, including LDCs and other commodity-dependent developing countries, have remained largely excluded from this process. In fact, the marginalization of LDCs in world trade has increased over the last two decades. Also, as noted in the *Trade and Development Report 2002*, in the case of many developing countries, the increase in manufacturing exports has not been accompanied by faster growth in their gross domestic product (GDP) or an increasing convergence with the income levels of developed countries. On the other hand, while the share of developed countries in world manufactured exports fell from 80 per cent to 70 per cent during this period, their share in world manufacturing value-added actually increased from 65 per cent to 73 per cent.

9. *Changing composition of developing country exports.* A large number of developing countries have not been able to shift from commodities, demand for most of which is increasing relatively slowly, and consequently run the risk of remaining marginalized in world trade unless they are able to add value to their exports. However, a bright spot is that growth in trade in certain commodities has been as rapid as in some manufactures, and some countries have successfully exploited this opportunity, thereby registering a significant expansion in their exports and incomes. A number of developing countries have also been able to diversify away from unprocessed commodities into higher-value-added resource-based or labour-intensive products, but the rate of growth in world

demand for these products varies and they may not offer opportunities for sustained export growth. Barring some East Asian NIEs, countries that have been able to increase their exports in skill- and technology-intensive sectors have been confined mostly to labour-intensive, assembly-type processes with low domestic value added.

10. *New services trade paradigm.* At the same time, the services sector, with important linkages to all economic activities, has been gaining in importance in all countries over the last two decades. Total exports of services quadrupled, growing from \$ 400 billion in 1980 to about \$ 1.6 trillion in 2002, while the share of services in total trade grew from 16.2 per cent to 19.4 per cent. The share of developing countries in total world exports of services increased from 19 per cent in 1991 to 23 per cent in 2001, while their share in world imports grew from 22 to 25 per cent over the same period. Workers' remittances to developing countries in 2001 amounted to \$72.3 billion, larger than development assistance; this indicates substantial scope for supply of services by developing countries and the potentially important contribution of the temporary movement of labour (GATS Mode 4) to their export earnings. Asia's share of world services exports rose from 10 per cent in 1980 to 17 per cent in 2002, while the relative positions of developing countries in Latin America and Africa stagnated: their shares of world services exports remained at 4 and 2 per cent respectively in 2002.

11. *Regional and South-South Trade.* Two other important trends in international trade became visible during the 1990s. First, there has been a rapid growth of regional trading agreements (RTAs), including South-South, North-North, North-South, plurilateral and bilateral arrangements, particularly following the establishment of the World Trade Organization (WTO) in 1995. Today, more than half of total world trade takes place within these RTAs. Second, there has been continued growth in the share of South-South trade in the total trade of developing countries: it has risen from 34 per cent in 1990 to around 43 per cent today, accounting for about 11 per cent of world trade. These developments and trends have important implications for the composition and direction of world trade as well as the participation of developing countries in dynamic and new sectors.

II. Participation of developing countries in dynamic and new sectors of world trade

Dynamic merchandise sectors

12. *Main dynamic sectors and products.* The annual average growth in the value of world merchandise exports in the last two decades has exceeded 8 per cent. However, there have been considerable differences in the growth rates of trade in individual sectors and products, with some rates twice as fast as the average growth in world trade. Inter-product variations in export growth have also meant considerable changes in the composition of international trade.

Table 1**Dynamic products in world exports, ranked by change in market share, 1985–2000
(Millions of dollars and percentages)**

Rank	SITC code	Product	Market share			Value		Annual growth rate
			1985	2000	Increment	1985	2000	
1	7764	Electronic microcircuits	0.82	3.38	2.56	13 976	186 887	18.9
2	7599	Parts and accessories for data processing machines	1.02	2.33	1.3	17 446	128 882	14.3
3	7524	Digital central storage units, separately consigned	0.02	1.01	0.99	295	55 942	41.9
4	7643	Television, radio and related transmitters and receivers	0.11	0.91	0.81	1 811	50 614	24.9
5	5417	Medicaments	0.53	1.24	0.71	8 985	68 452	14.5
6	7649	Parts and accessories for telecom and recording apparatus	0.67	1.28	0.61	11 346	70 633	13
7	7641	Telephonic and telegraphic apparatus	0.28	0.83	0.55	4 704	45 962	16.4
8	7523	Complete digital central processing units	0.3	0.74	0.44	5 160	40 845	14.8
9	7721	Electrical apparatus for making/breaking electrical circuits	0.64	1.05	0.41	10 919	58 297	11.8
10	7788	Other electrical machinery and equipment	0.48	0.86	0.39	8 132	47 829	12.5
11	8942	Children's toys, indoor games	0.4	0.79	0.39	6 804	43 509	13.2
12	8939	Miscellaneous articles of chemicals	0.4	0.77	0.37	6 815	42 483	13
13	7924	Aircraft, mechanically propelled (other than helicopters)	0.44	0.78	0.34	7 496	43 222	12.4
14	7525	Peripheral units for data processing equipment	0.66	0.98	0.32	11 248	54 390	11.1
15	7712	Other electric power machinery and parts	0.17	0.49	0.32	2 829	26 929	16.2
16	7731	Insulated electric wire, cable, bars, strip and the like	0.29	0.6	0.3	5 012	33 062	13.4
17	5148	Other nitrogen-function compounds	0.15	0.45	0.3	2 578	25 009	16.4
18	8462	Under garments, knitted or crocheted, of cotton	0.16	0.44	0.28	2 714	24 145	15.7
19	7768	Piezo-electric crystals, parts of transistors and cathode valves	0.31	0.58	0.27	5 285	32 259	12.8
20	7522	Complete digital data processing machines	0.2	0.47	0.27	3 400	26 035	14.5
21	7810	Passenger motor cars	4.9	5.15	0.25	83 547	285 222	8.5
22	5839	Other polymerisation and copolymerisation products	0.16	0.4	0.24	2 736	22 087	14.9
23	8219	Other furniture and parts	0.32	0.55	0.22	5 495	30 281	12.1
24	7763	Diodes, transistors and similar semiconductor devices	0.22	0.42	0.2	3 735	23 025	12.9
25	7149	Parts of non-electrical engines and motors	0.28	0.46	0.19	4 712	25 648	12
26	8211	Chairs and other seats	0.26	0.43	0.18	4 366	24 006	12
27	8983	Gramophone records and other sound or similar recordings	0.33	0.5	0.17	5 609	27 880	11.3
28	8720	Medical instruments and appliances	0.24	0.41	0.17	4 122	22 722	12.1
29	8451	Jerseys, pullovers, twin-sets, cardigans, jumpers etc	0.39	0.54	0.15	6 594	29 987	10.6
30	8439	Other outer garments, women's, girls', infants', of textile fabrics	0.3	0.45	0.15	5 161	25 015	11.1
31	7284	Machinery and parts for specialized industries	0.68	0.82	0.14	11 618	45 617	9.6
32	7132	Internal combustion piston engines for road vehicles	0.45	0.58	0.14	7 599	32 368	10.1
33	5989	Chemical products and preparations	0.45	0.58	0.13	7 603	31 865	10
34	7611	Television receivers, colour	0.27	0.4	0.13	4 589	21 955	11
35	5156	Heterocyclic compounds; nucleic acids	0.32	0.44	0.12	5 445	24 599	10.6
36	7849	Other parts and accessories of motor vehicles	2.23	2.33	0.1	37 954	129 051	8.5
37	6672	Diamonds (except sorted industrial diamonds), unworked, cut	0.83	0.92	0.09	14 166	50 741	8.9
38	7139	Parts of the internal combustion piston engines	0.34	0.4	0.06	5 814	22 249	9.4
39	7492	Taps, cocks, valves etc for pipes, boiler shells, tanks, vats	0.34	0.4	0.06	5 854	22 168	9.3
40	7929	Aircraft parts (except tyres, engines, electrical parts)	0.49	0.53	0.04	8 334	29 475	8.8
Total above products			21.84	36.71	14.87	372 006	2 031 347	12

Source: United Nations COMTRADE database.

13. Table 1 shows the trend growth rates for the period 1985–2000 of the 240 most dynamic products in world exports, which accounted for nearly 40 per cent of the value of world exports by 2000. As a group, these dynamic products grew at 12 per cent annually over the 15-year period and raised their market share by almost 15 per cent. It should be noted that a higher degree of disaggregation or a shorter period than used in the table could probably have succeeded in identifying more “niche products”, where demand has increased rapidly in recent years. This is a relevant consideration for more in-depth sector-specific and country-specific analysis in the context of UNCTAD sectoral trade reviews.

14. Among these 40 most dynamic products, 25 belong to four manufacturing categories: electronic and electrical goods (SITC 75, 76, 77); automotive (SITC 78, 79); engines and parts (SITC 71); and apparel (SITC 84). Together, they account for more than a quarter of the total export value in 2000. They also accounted for more than 10 percentage points of the growth of world trade in 1985–2000. As to the remaining products, those falling into the chemicals category (SITC 5) grew annually as a group by more than 13 per cent over the period 1985–2000 period. These are finished products from industries that require large research and development (R&D) expenditures and are characterized by great technological complexity and/or economies of scale.

15. The fastest-growing category of products – electronic and electrical goods – accounts for a sizeable share in world exports (more than 16 per cent); in this category, the three fastest-growing product groups (computers; transistors and semiconductors; computers; telecommunication equipment and parts of computers and office machines) alone increased their share in world exports almost four times, from 2.76 per cent in 1985 to 9.7 per cent in 2000. The fragmentation of global supply chains has been a major factor fuelling this trend. Taken together, the share in world exports of the seven groups of electronic and electrical products included in table 1 almost tripled to reach about 16.5 per cent in 2000. The automotive industry accounted for nearly 9 per cent of exports but grew relatively slowly, providing only 0.6 percentage points of the increase. Apparel accounted for less than 2 per cent of world trade and provided 0.6 percentage points of the increase.

16. *Commodities.* Although the share of commodities in world trade has declined over time, a disaggregation of the commodity sectors would indicate that there are a number of commodities that have shown market dynamism. For example, silk, cereal preparations and non-alcoholic beverages and certain fruit and fruit preparations categories could be regarded as dynamic market products, their annual growth rate over the period under consideration being higher than 10 per cent. Disaggregated figures indicate that cashew nuts, kiwi fruit, mangoes and poultry meat are dynamic products with growth rates of 13.7, 17.0, 15.3 and 10.4 per cent respectively during the past two decades. Other agricultural commodities exhibiting market dynamism in varying degrees include fresh crustaceans; fish preparations; processed animal and vegetable fats; fuel wood and charcoal; fresh vegetables; sugar preparations; margarine and shortening; crude vegetable materials; manufactured tobacco; and meat preparations.

17. *Developing country participation in the main dynamic merchandise sectors.* The developing countries as a whole appear to have become major players in markets for many dynamic sectors,¹ accounting for 30 per cent of world exports of the 20 most dynamic products (table 2). However, it is only in the case of knitted undergarments, where China is the leading exporter, that their share in world exports exceeds that of developed countries. Developing countries account for only one tenth of

world exports of products that are high in R&D content, technological complexity and/or economies of scale. In this category, it is only in the case of optical instruments that they account for nearly one quarter of world exports.

Table 2
Shares of main exporters and of developing economies in world exports of the most market-dynamic sectors, 2001^(a)

(Percentage)						
SITC Code	Product group	Share of developing countries	Main exporting countries	Share	Main exporting developing countries	Share
289	Ores and concentrate of precious metals, waste and scrap n.e.s	42	United States Papua New Guinea Canada South Africa Germany	24 23 8 8 5	Papua New Guinea South Africa Peru Bolivia United Republic of Tanzania	23 8 1.5 1.4 1.3
341	Gas, natural and manufactured	36	Canada Russian Federation Norway Algeria Indonesia	22 22 9 7 7	Algeria Indonesia Malaysia Argentina Myanmar	7 7 4.3 0.8 0.7
515	Organo-inorgan and heterocyclic compounds	9	Ireland Germany United States France United Kingdom	22 12 11 8 8	Singapore China India Korea, Republic of Mexico	4.4 2.4 0.5 0.5 0.4
541	Medicinal, pharmaceutical products	7	Germany United States Switzerland United Kingdom France	14 11 10 10 10	China India Singapore Mexico Argentina	1.5 1.0 0.9 0.8 0.3
551	Essential oils, perfume and flavour materials	13	Ireland France United States Switzerland Germany	26 12 11 10 8	Singapore Swaziland China Argentina Mexico	2.0 1.6 1.1 1.0 0.9
553	Perfumery, cosmetics and toilet preparations	13	France United States Germany United Kingdom Italy	24 13 11 10 6	Singapore Mexico China Thailand China, Taiwan Province of	1.9 1.6 1.3 1.1 0.7
628	Rubber articles, n.e.s.	16	Germany United States Japan France Canada	15 14 11 7 6	China China, Taiwan Province of Thailand Mexico Singapore	2.9 2.2 2.2 1.5 1.4
714	Engines and motors, non-electric	4	United States United Kingdom Germany France Canada	30 21 12 10 6	Mexico Korea, Republic of Malaysia China Brazil	1.2 0.4 0.4 0.3 0.3
752	Automatic data processing equipment	43	United States Singapore Netherlands China Japan	12 10 9 8 7	Singapore China China, Taiwan Province of Mexico Malaysia	10 8 7.0 5.6 4.5
759	Office, automatic data processing machinery parts, accessories	45	United States Japan China, Taiwan Province of Singapore Ireland	13 10 9 8 7	China, Taiwan Province of Singapore Malaysia China Thailand	9 8 6.6 6.6 4.5

¹ We refer to “sectors” rather than “products” as the level of aggregation in table 2 is higher than it was in the figures presented in table 1. Thus, in our terminology, sectors correspond to the 3-digit level of the SITC and products to the 4-digit level of the SITC.

SITC Code	Product group	Share of developing countries	Main exporting countries	Share	Main exporting developing countries	Share
764	Telecommunications equipment and parts	32	United States United Kingdom Germany China Korea, Republic of	11 9 8 8 6	China Korea, Republic of Mexico Malaysia China, Taiwan Province of	8 6 5.8 3.1 2.7
771	Electric power machinery, and parts thereof	41	China United States Germany Mexico Japan	12 10 10 9 7	China Mexico China, Taiwan Province of Singapore Thailand	12 9 5.7 2.9 2.7
772	Electrical apparatus such as switches, relays, fuses and plugs	29	Germany United States Japan France Mexico	14 14 12 6 6	Mexico China, Taiwan Province of China Singapore Malaysia	6 5.2 4.4 3.4 3.1
773	Electricity distributing equipment	37	Mexico United States Germany China Japan	17 12 9 5 5	Mexico China Korea, Republic of China, Taiwan Province of Philippines	17 5 1.9 1.7 1.6
776	Thermionic, cold and photo-cathode valves, tubes and parts	47	United States Japan Singapore Malaysia China, Taiwan Province of	17 14 13 7 7	Singapore Malaysia China, Taiwan Province of Korea, Republic of Philippines	13 7 7 6.8 5.8
778	Electrical machinery and apparatus, n.e.s.	28	Japan United States Germany China Mexico	17 12 12 8 6	China Mexico China, Taiwan Province of Singapore Korea, Republic of	8 6 3.8 3.4 1.9
783	Road motor vehicles, n.e.s.	11	Germany Netherlands Canada Belgium France	23 12 11 9 7	Korea, Republic of Turkey Brazil Mexico Botswana	3.6 2.3 1.4 1.3 0.5
846	Under garments, knitted or crocheted	60	China United States Turkey Mexico Italy	13 7 5 5 5	China Turkey Mexico India China, Hong Kong SAR	13 5.4 5 4.1 2.9
871	Optical instruments and apparatus	23	Japan United States Germany China, Taiwan Province of China	27 20 9 7 5	China, Taiwan Province of China China, Hong Kong SAR Korea, Republic of Singapore	7 5 2.6 2.5 1.2
872	Medical instruments and appliances	17	United States Germany Netherlands Mexico United Kingdom	27 11 6 6 5	Mexico Singapore China Dominican Republic Costa Rica	6 2.3 2.0 1.7 1.0
	Total	30				

Source: UNCTAD Handbook of Statistics

(a) Product groups ranks by growth in export value. 1991–2001.

18. The share of developing countries in the total exports of automotive data processing equipments, office machinery parts, electric power machinery, and transistors and valves categories is over 40 per cent. The principal exporters of the most dynamic products in world markets are the industrialized countries. Among developing countries only some of the East Asian economies have succeeded in supplying the world markets with a significant quantity of dynamic products, while most

of the other developing regions appear to be largely excluded from this process. Even in the case of the first-tier NIEs, only three of their most dynamic products are among the 20 most dynamic products in world markets. These are computers, parts of computers and office machines, and optical instruments. An important feature of the performance of the East Asian NIEs is that they have been able to gain market shares in all markets, thus signifying their emergence as global production bases. Expansion of exports of certain food items that are among the most dynamic agricultural products has helped the trade performance of Brazil, Kenya, China and Thailand. South Asia participates in a number of dynamic sectors, but there are significantly fewer electronics products than in East Asia. Countries in the Latin American and Caribbean region appear to have limited participation in the most dynamic world exports, while LDCs and most African countries remain marginalized. For many of these countries, structural and supply-side problems, cost of capital, external market conditions and so forth continue to affect their ability to diversify into higher-value-added exports.

**Box 2. Bio-science meets electronics:
Technological change and trading prospects for developing countries**

The increasing convergence between bioscience and electronics is radically changing the entire spectrum of health care, from disease identification and diagnosis, to treatment and prevention. This opens up a huge area of global business, attracting companies active in otherwise different fields to come together. It has already attracted attention of major global corporations, including a possible \$9 billion acquisition of Amersham International, a UK biotechnology and medical company, by GE, the US industrial giant. This indicates a new phase of “creative destruction” for which this sector is well known. Developing countries can potentially benefit from the opportunities offered by this process.

According to UNCTAD statistics, world trade in medical equipments and appliances stood at over \$250 billion in 2000–2001, and has been growing at a rate in excess of 9 per cent over the last decade. Developing countries command nearly one fifth of this figure. While five countries (Mexico, Singapore, China, Dominican Republic and Costa Rica) command the lion's share of developing country exports in this category, a number of other countries, such as India, have considerable potential in this field. Developing countries that have been able to make progress in putting in place medical engineering and ICT infrastructures stand to gain most. The process also opens up many possibilities for innovation involving pharmaceuticals and medicinal products, where a number of developing countries have established a notable presence in world trade.

Another very tangible way in which this process can help developing countries is identifying and fighting diseases. Multilateral cooperation and action need to keep focusing on global public interest in this regard, just as they have done in the case of trade-related aspects of intellectual property rights and public health. That too could facilitate developing country participation in this field.

Environmentally preferable products and other non-traditional sectors

19. There are a number of other sectors where developing countries are emerging as significant players. While some of them command a noticeable share of world trade, many others are new products, with small trade volumes. Many do not have specific headings in trade classification and are included in sub-headings as “others”.

20. Environmentally preferable products (EPPs) include organic, non-wood forest, traditional-knowledge-based and renewable energy products. Markets for certain EPPs are growing quickly and can be further promoted. For example, the world market for organic food and beverages in 2003 is estimated at \$ 23–25 billion. The main markets for organic products are Northern and Western Europe, the United States and Japan, while domestic markets are growing in some developing countries.

21. There are non-timber, non-traditional agricultural and natural product groups that have, as a common denominator, greater value-added potential, although their production levels are generally small. In many cases, they have a significant role in local income generation for rural and indigenous communities. The main product groups include the following: edible plant products; food ingredients (e.g. colouring and flavouring materials); cosmetic and pharmaceutical natural ingredients and medicinal plants (e.g. aromatic and medicinal plants and extracts of plants, essential oils, perfumes, natural dyes, enzymes and biochemical compounds); traditional medicine (e.g. ayurvedic and Chinese medicine); latex, resins, gums, natural fibers and products thereof; natural and traditional medicines; animals and derivative products; and other natural products (e.g. handicrafts, vegetal leather). Many of these products are derived from forest ecosystems, whose ecology and management are best understood by local and indigenous communities. Some of these have been a source of innovation in pharmaceutical, biotechnology, cosmetics and agrochemical industries.

Emerging and dynamic services sectors of export interest to developing countries

22. *Outsourcing of services* Outsourcing of services as such is not new, as it has been taking place among the OECD countries. However, owing to the advances in network technology, high-speed data networks and the increase in bandwidth capacity, outsourcing of services has in recent years acquired an increasing global reach, as indicated by a rapid internationalization of information-technology-enabled services (ITES), including business process outsourcing (BPO). It has enabled developing countries to participate in this process. It has been estimated that the global market size of ITES/BPO will be a \$300 billion by 2004. This market has grown since 1999 at an average rate of 23 per cent. Another estimate indicates that the worldwide BPO will increase to \$ 585 billion by 2005. This represents one of the fastest growing e-commerce services. Outsourcing provides a win-win outcome for both home and host countries.

Box 3. Outsourcing of services to developing countries: The new kid on the trade block

In the context of a globalized business and round-the-clock services environment, outsourcing to developing countries represents a vital strategic tool for a growing number of corporations, with estimated financial savings of as high as 70 per cent accruing to them. According to the McKinsey Global Institute, every \$1 of outsourcing by a US company creates \$1.45 of value globally, of which the United States captures back \$1.12, while the service-supplying country receives 33 cents. The developing countries and countries with economies in transition benefiting from outsourcing include India, China, Brazil, the Philippines, the Russian Federation, and a number of Central and Eastern European countries.

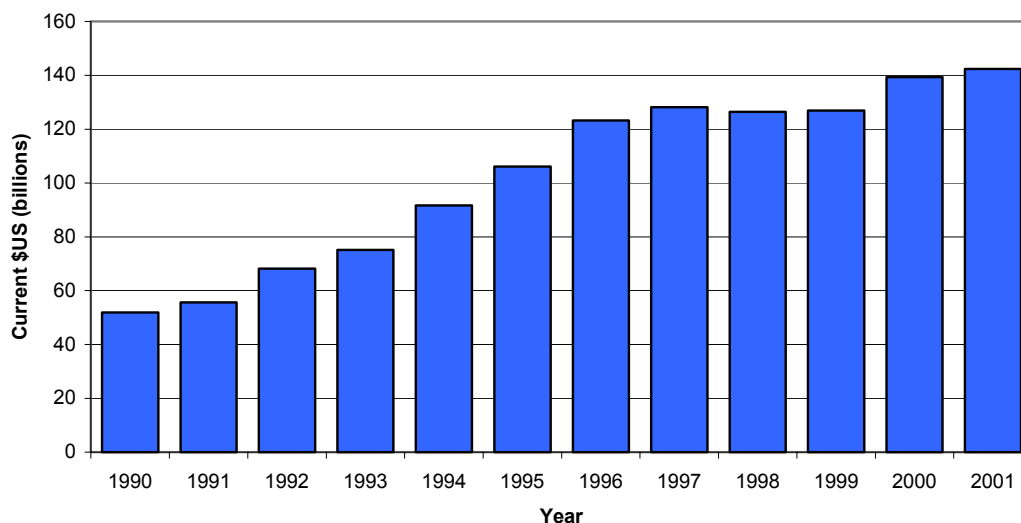
The main categories of BPO and ITES services outsourcing to developing countries, in ascending order of value chain, are: (i) data entry and conversion type activities such as medical and legal transcription services; (ii) processing and simple voice and on-line customer relations support services based on rules set by the client, including call centre services, e-mail processing, data processing, billing and payments; (iii) problem-solving and decision-making activities such as developing solutions for improving processes or streamlining systems, including human resource administration and computer applications; (iv) teleworking services that involve direct interaction with customers and more elaborate transactions with the client but beyond simple voice-based support services, such as web support, customer help desk, technical back-office processing, development of software for entire business processes and hardware support services; (v) a variety of research and engineering servicing, including R&D on pharmaceuticals, 3-D modelling, finite analysis, CFD analysis, technical specifications for tenders, plant engineering and financial analysis.

23. *Movement of natural persons.* Movement of natural persons supplying services has been a major source of export earnings for a number of countries. Remittances currently amount to about \$70 billion a year and exceed the current level of official development assistance. The total amount of

resources remitted may, however, be much greater since a large number of transactions are effected through informal channels. Dynamic gains from this for the home country are significant, because they increase investment and domestic savings, promote development of other sectors of the economy and trade, ensure transfer of technology, entrepreneurship and knowledge, and build human capacities. There are potentially important opportunities for developing countries to gain significant benefits from dynamic services sectors such as ICT, professional services, health in health and education, and consulting services. There is therefore a strong political and economic case in favour of more comprehensive and commercially meaningful market access commitments in Mode 4 under the GATS.

24. *Tourism services.* Tourism is increasingly viewed as a viable option for the sustainable economic and social development of many developing countries, including LDCs. As chart 1 indicates, tourism receipts of developing countries in nominal value increased consistently throughout the 1990s, from over \$50 billion in 1990 to \$140 billion in 2001. Some developing countries, including a few of LDCs, have succeeded in establishing internationally recognizable brand names or niches in the tourism sector. For some countries, tourism resources can be regarded as ecological heritage. Sustainable tourism development can be an important way of maximizing benefits from tourism resources of developing countries.

Chart 1. Developing Country Tourism Receipts



Source: World Tourism Organization

Box 4. Tourism services in LDCs: Poor nations, rich destinations

While LDCs account for only 0.5 per cent of world services export, international services are an important aspect of their economies. At the end of 1990s, services accounted for nearly one fifth of their total export of goods and services. The share of LDCs in world export of tourism services jumped from 0.6 per cent in 1988 to 0.8 per cent at the end of the 1990s. Throughout the 1990s, tourist inflows to LDCs increased more rapidly than to the rest of the world. Particularly strong growth was observed in seven LDCs: Cambodia, Mali, the People's Democratic Republic of Lao, Myanmar, Samoa, Uganda and the United Republic of Tanzania. In some LDCs, such as Maldives, the Gambia, Vanuatu and Tuvalu, tourism remained the main export sector of the economy throughout the 1990s. It has been among the top five sectors in nearly two thirds of LDCs. In the case of Maldives and Vanuatu, tourism services helped to generate a surplus in the external balance of goods and services. In Comoros, Samoa and the United Republic of Tanzania, international tourism has been the most important source of foreign exchange earnings since 1985. For many LDCs, tourism represents a viable option for sustainable economic and social development, poverty reduction, and beneficial integration into the global economy. Main determinants of developing country participation in dynamic and new sectors.

III. Main determinants of developing country participation in dynamic and new sectors

National policies

25. Successful experiences point to the importance of three basic policy thrusts – namely, to create a good investment climate in which corporate and national development interests are mutually compatible; to build supply capacity and competitiveness; and to effectively manage integration with the global economy. A variety of measures were applied to create a strong investment–profits nexus. Tax policies were used to encourage retention of corporate profits.

26. Sectorally focused policy instruments included selective protection, specific exemptions from taxes and duties, controls over interest rates and credit allocation, and managed competition. External sector policies included phased liberalization and managed exchange rates. Measures were taken to facilitate local R&D, including financial subsidies, particularly for large and risky projects, the creation of science parks and special industrial estates. These policies were applied in a time-limited and targeted manner with clear performance standards.

Globalization of production systems

27. International systems of production sharing and integrated production, through which the transnational corporations (TNCs) take advantage of rapidly changing differences in costs, resources and logistics, have been the main engines of the globalization of the production process. The performance of more successful countries in expanding exports of dynamic and new products is intimately linked with the expansion of international production systems. In some of these countries, foreign affiliates account for nearly one half or more of manufacturing exports. There is also a distinctive regional pattern in the different experiences of countries, with the bulk of TNC-related export activity in the developing world concentrated in a handful of countries, mainly in East and South-East Asia. Export performance requirements linked to incentives such as export subsidies have been an important instrument used by a number of countries to prod TNCs to seize export opportunities, but such subsidies are restricted under the Agreement on Trade-Related Investment Measures.

28. Rapidly changing corporate strategies and growing complexities of production systems make it difficult for smaller and newer suppliers from developing countries who do not have the requisite capabilities and competitive advantage. However, it should be a key priority for developing countries to identify and continuously expand their niches along the entire value chains. Developing countries would also need to get the host country affiliates to create deeper domestic economic linkages, as well as to promote technological change, skill development and domestic value added.

Low and declining value-added trap

29. The extent of benefit from participating in trade in dynamic and new sectors is determined, to a large degree, by the size of domestic value added therefrom. While some developing countries have been able to enter a range of these sectors of world trade, in many cases they have not achieved significant increases in their export value added. The East Asian NIEs in particular managed to successfully combine diversification and trade expansion with growth in manufacturing value added and GDP. Many other developing countries, on the other hand, often find themselves caught in a low and declining value-added trap arising from: (a) “export illusion” caused by high import content of exports, wherein export earnings do not reflect the true domestic value added; and (b) “fallacy of composition”, which arises when too many countries rush into the same sectors or products, thereby driving down terms of trade and export earnings, and thus denying themselves the achievement of the original objective of improving domestic value added through diversification. Addressing these twin problems should be a key policy priority for developing countries.

Changes in income and demand

30. For certain items of export interest to developing countries, including some agricultural and industrial raw materials, global income elasticity of demand is typically low, which at first sight may indicate that the growth of global income may not result in large increases in demand. However, much depends on the composition of global demand growth. As illustrated by the growth of demand in China over the past few years, China itself being a major dynamic factor in world trade, countries at lower income levels typically have higher income elasticities for both food items and raw materials. This points to the possibility that if the growth rate of developing countries rises to a sufficient level, many sectors and products that have displayed limited vibrancy in the world market could well become more dynamic. At any rate, the dynamic products enjoy higher income elasticity of demand. For example, demand for information technology products in many countries has outpaced income growth, resulting in an increase in the share of spending thereon. Moreover, factors such as improvements in product innovation and usage as well as lifestyle trends are also among factors affecting demand.

Market access and market entry

31. The ability of developing countries to participate in trade in dynamic and new sectors of world trade depends critically on their ability to respond to new opportunities existing in world markets. Their capacity to do so depends significantly on market access conditions and market entry requirements set in importing countries, including by large distribution networks. For many developing countries, integration into the world economy means being able to meet those market entry conditions, and creating the necessary impetus for competitiveness and development. Some of the access and entry barriers are difficult to overcome even for the European Union and the United States in each other’s markets, thus magnifying the problems facing developing countries.

32. There are broad sets of factors that may contribute to influencing positively or negatively the export competitiveness of developing countries in general, and their diversification into dynamic and new sectors in particular, namely: (a) improved, predictable and effective market access in areas of export interest to developing countries in their premium markets; (b) market entry conditions and globally accepted or unilaterally and privately imposed standards and health and safety regulations which could nullify market access; and (c) the competitiveness, and hence the export performance of firms and/or industries of developing countries and their agility in responding to changing market access and entry conditions and requirements.

IV. Policy implications

33. An important lesson from successful experiences is that developing countries themselves will need to make the necessary strategic policy choices in regard to their beneficial participation in dynamic and new sectors of world trade. These must be based on a realistic assessment of the actual and potential comparative advantage of each country with regard to different sectors as well as in the context of the entire value chain. There is no single road map for success; however, a number of basic prerequisites should be met. The quality of economic and financial governance, the degree of political stability, efficiency of public administration and effectiveness of management of integration with the global economy are among key factors affecting developing countries' efforts. It is also important to ensure the coherence of goals and objectives of different policies and measures, and to maximize their synergies. True, the developing countries today do not have the range of options that were available to the early industrializers among them, owing in large part to "inside border" provisions under certain WTO agreements. From this standpoint, the issue of policy space is highly relevant to discussions of policy approaches in the context of new and dynamic sectors.

34. Equally important are issues relating to the provision of adequate development financing and meaningful debt reduction, as well as international market structure issues that affect the competitiveness of developing countries' exports. Recalibrating development cooperation programmes to adequately and coherently support developing countries' efforts to beneficially participate in new and dynamic sectors should be an important donor priority. At the same time, protectionist pressures, which are currently evident in the case of agriculture, textiles and clothing, Mode 4 of the GATS and outsourcing, should be effectively confronted. A successful strategy will require genuine partnership and shared efforts between developing countries and their development partners.

35. Some broad policy issues are taken up below to assist discussions at the thematic session of UNCTAD XI on *Policy options and strategies to support developing countries in the most dynamic sectors of world trade*. As noted at the outset, these are meant to provide general directions, while specific policies and actions will vary among sectors and countries. An important challenge for the policy makers of each country, therefore, would be to elaborate policy frameworks specific to their own case, and to apply policy instruments in a strategic, coherent and beneficial manner.

Building competitive supply capacities

36. Two important strategic objectives policies at macro, sectoral and micro levels relate to increasing domestic supply capacity and enhancing international competitiveness. Specific market failures and missing markets, the lack of an entrepreneurial base, imperfections in technology and capital markets, risks involved in starting up new activities and exporting, and linkages and externalities among different sectors should be adequately factored into policies and measures. Main axes of an appropriate policy mix should include the following:

- A stable and supportive macroeconomic, regulatory and financial environment with the necessary institutional structures in place;
- Strategic use of complementary policies (e.g. trade, industrial, financial and technology policies) to address structural deficiencies, technology and infrastructural gaps, and develop productive capacities;
- Strengthening institutional capabilities for policy design and implementation, as well as for related trade negotiations at the international level;
- Effective government–business cooperation, including to establish and maintain compatibility between national policy objectives and core business interests;
- Targeted use of social policies (e.g. education, health and employment policies) to develop and upgrade human resources, with emphasis on a broad-based distribution of gains.

37. *Sectoral and enterprise-level policies.* A successful strategy should aim at providing targeted support in order to:

- Strengthen the ability of firms to innovate and integrate technology towards specialization in higher-value-added goods and services;
- Establish strong networks of enterprises, particularly small and medium-sized ones, which are effectively linked to world markets, as well as to major companies connected with international trade;
- Assist women's enterprises, urban informal sectors, and traditional and rural production;
- Ensure greater access to specialized information, including market intelligence, greater supplier–producer interaction, provision of high quality public goods, support to build brand recognition, and other business and trade facilitation measures to improve collective efficiency and competitiveness;
- Develop reliable and high-quality infrastructures, such as well-maintained transport and communication infrastructure; information, communication, marketing and logistical facilities; and export processing zones and industrial and science parks.

Attracting development-oriented FDI

38. A key challenge facing the developing countries is to strategically tap TNC potential in order to ensure that they can successfully move into increasingly high-value-added exports and, in the process, reap maximum development gains. Policies and measures should aim to:

- Ensure that the objectives and targets of FDI policies are consistent with, and an integral part of, their broader development objectives, policies and strategies;
- Provide a package of incentives to attract FDI aimed at “racing to the top”, rather than “racing to the bottom”, in order to ensure that the TNCs invest in dynamic and new sectors and to maximize host country gains therefrom;
- Involve foreign affiliates in the development and upgrading of human resources, and institutional and technological development;
- Encourage linkages between local suppliers and foreign affiliates in order to maximize benefits from FDI, ensure a sustainable upgrading of export-oriented activities, and help diffuse skills, knowledge and technology to domestic firms;
- Provide strategic government intervention to facilitate the development of industrial clusters involving FDI.

Market access and market entry issues

39. *The role of the multilateral trading system.* The Doha Work Programme negotiations provide an important opportunity to address a number of key issues relevant for developing countries' participation in dynamic and new sectors:

- Effectively tackling high tariffs, and tariff peaks and escalation facing items of export interest to developing countries;
- Meaningful reform in agriculture, including substantial improvement in market access for developing countries, phasing out of export subsidies and substantial reduction in trade-distorting domestic support;
- Liberalization of services sectors and modes of supply of export interest to developing countries, particularly Mode 4 of the GATS;
- Adequate and operational special and differential treatment provisions to ensure, *inter alia*, that the developing countries have the requisite policy space and flexibility;
- Effectively addressing problems arising from the application by developed countries of measures under SPS, TBT and ADM provisions.

Taking advantage of preferential market access opportunities

40. Preferential trade arrangements involving developing countries have provided some opportunities for these countries to expand and diversify exports. Three major forms of trade preferences can be distinguished: (a) the Generalized System of Preferences (GSP); (b) special preferential regimes for groups of developing countries (such as Lomé/Cotonou; the African Growth and Opportunity Act (AGOA); the Caribbean Basin Initiative); and (c) regional free-trade arrangements between developed and developing countries. This latter type of arrangement differs from the others in that it involves reciprocal rather than unilateral trade preferences.

41. The GSP has been a useful tool for the early industrializers and successful exporters among developing countries, although benefits to many other preference-receiving countries, including LDCs and Africa, have been limited. Improvements in the preferential schemes could play a positive role in helping countries that have not been able to meaningfully participate in dynamic and new export sectors to do so. This would require:

- Improved scope and coverage of the schemes;
- More liberal rules of origin;
- Avoidance of conditionalities in utilizing schemes.

42. *Removing market entry barriers.* Market access difficulties are compounded by market structure issues, as well as by technical regulations and standards, SPS measures and complex and divergent rules of origin. Even more important are private sector measures and requirements such as voluntary standards. For instance, there is a growing trend towards harmonizing private sector standards among international supermarket chains, making conformity with those standards a requirement for market entry. A key priority is to ensure that these standards and measures are developed transparently with the participation of developing countries, and applied in a non-discriminatory manner.

Regional economic cooperation and integration

43. South–South trade and regional economic and trade arrangements can provide a supportive environment for entering dynamic and new sectors. For example, MERCOSUR and AFTA have had a substantial impact on the expansion of trade in specific sectors among participating countries, as well as between these countries and the rest of the world. South-South trade can be a useful testing ground for developing countries to build export capacities in dynamic and new sectors. The dynamically changing regional division of labour, known as the “flying geese” model, where less developed countries enter simpler manufacturing stages as the more advanced economies successfully shift from to increasingly sophisticated manufacturing activities, remains a relevant ideal for regional

cooperation. Such a process can also help countries avoid the low and declining value-added trap. Mapping regional divisions of labour along value chains could help countries in their diversification strategies.

V. Conclusion: Role of UNCTAD's sectoral trade reviews

44. Through a case-by-case treatment of the dynamic and new sectors, the UNCTAD sectoral trade reviews can play an important role in assisting policy makers and other stakeholders in identifying opportunities in particular sectors and articulating policy options and instruments, taking into account country-level specificities. By building on the three pillars of UNCTAD (analytical work, consensus building through intergovernmental deliberations, and capacity-building support), and bringing together the principal stakeholders (including developing countries, their development partners, relevant international organizations, representatives of the private sector, including concerned TNCs and developing country enterprises, and civil society), the sectoral trade reviews could serve as a forum for policy dialogue focusing on:

- Identification of specific dynamic and new sectors and products of export interest to developing countries, and of their actual and potential markets;
 - Policy options and practical actions at the national, regional and international levels for translating opportunities into actual export activities and higher domestic value added;
 - Sharing of experiences and lessons learnt;
 - Market access and entry issues and the role of the MTS and RTAs;
 - Promotion of public–private–non-governmental partnership and networking;
 - Development cooperation, including in the context of capacity-building support;
 - Distribution of development gains, taking into account poverty reduction and gender equality aspects.
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