



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

GLOBAL FORUM ON INDUSTRY

Perspectives for 2000 and Beyond

NEW DELHI, INDIA, 16-18 OCTOBER 1995

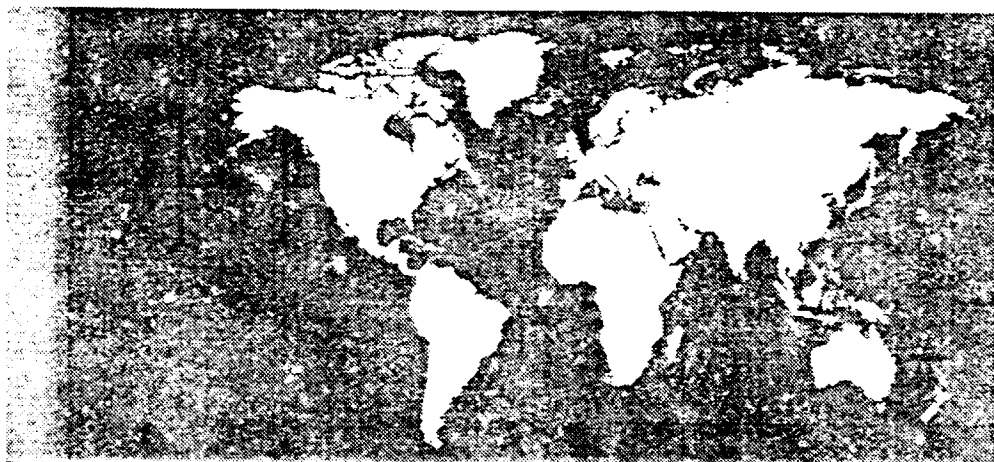
Distr.
LIMITED

ID/WG.542/14(SPEC.)
27 September 1995

ORIGINAL: ENGLISH

21367

Panel IV Global trade liberalization: Implications for industrial restructuring



Issue Paper

Global trade liberalization: Implications for industrial restructuring

Prepared by
the UNIDO Secretariat



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

The designations employed and the presentation of material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. Mention of company names and commercial products does not imply the endorsement of UNIDO. This document has not been formally edited.

CONTENTS

	<i>Page</i>
INTRODUCTION	1
I. PRINCIPAL ISSUES FOR CONSIDERATION	3
II. BINDING AND REDUCTION OF TARIFFS	4
III. SAFEGUARDS AND ANTI-DUMPING	6
IV. TRADE-RELATED INVESTMENT MEASURES	7
V. TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS	8
VI. QUALITY, ECOLOGY AND SOCIAL CONSIDERATIONS	9
VII. PHASE-OUT OF THE MULTI-FIBRE ARRANGEMENT	9
VIII. AGRICULTURE AND AGRO-BASED PRODUCTS	10
IX. OTHER INDUSTRIAL SUBSECTORS	11
A. Pharmaceuticals	11
B. Biotechnology	11
C. Engineering goods	12
D. Leather and footwear	12
X. SERVICES	13
XI. NEED FOR INDUSTRIAL RESTRUCTURING	13
XII. AFRICAN, CARIBBEAN AND PACIFIC COUNTRIES	14
XIII. REGIONAL TRADING GROUPS AND THE AGREEMENTS	15

LIST OF ABBREVIATIONS

ACP	African, Caribbean and Pacific Group
CBI	Caribbean Basin Initiative
CAD	Computer-aided design
EU	European Union
FDI	Foreign direct investment
GATs	General Agreement on Trade in Services
GSP	Generalized system of preferences
IPRs	Intellectual property rights
LDCs	Least developed countries
MFA	Multi-Fibre Arrangement
MFN	Most-favoured-nation
SMEs	Small and medium enterprises
TNCs	Transnational corporations
TRIMs	Trade-related investment measures
TRIPs	Trade-related aspects of intellectual property rights
VERs	Voluntary export restraints

INTRODUCTION

1. The Uruguay Round Agreements^{1/} comprise a series of far-reaching decisions on global trade liberalization, which will have a major impact on all trading nations. The long-term effects of these Agreements can be expected to result in a substantial increase in global trade, because of a significant reduction of tariffs and a series of Agreements intended to expand market access in different countries for various products.^{2/} A major new global organization, the World Trade Organization (WTO), has also been set up to manage global trading relationships and to settle disputes.

2. The impact of the Uruguay Round Agreements will not only bring about greater liberalization and expansion in global trade, but will also promote increased global interdependence. Since several of the Uruguay Round reforms have phased-in periods, most of the gains from the Agreements will largely be felt in the long term. An earlier GATT estimate^{3/} on static gains suggested that, when the Uruguay Round is fully phased in, global trade in goods and services will increase by about US\$ 750 billion (in 1992 dollars) or about 12 per cent over the level that would otherwise exist in the year 2005. Other estimates of the benefits of the Uruguay Round trade liberalization - including employment and welfare - based on various models differ considerably and tend to be substantially lower.^{4/} It is considered that an estimate of US\$ 200-280 billion would be more realistic. The effects of the Agreements will vary considerably. The principal gains are likely to accrue to developed economies, which comprise the major trading countries. The Agreements also provide considerable potential and opportunity for semi-industrialized developing countries and transition economies to increase their participation in international trade and related investment and technology flows and transactions. The position of the 70 or so less-developed economies in Africa, the Caribbean and the Pacific and particularly the 48 least developed countries (LDCs) is, however, likely to be adversely affected. Now that the Agreements have come into effect, their implications need to be assessed, together with the adjustments in industrial strategies and enterprise restructuring that may be necessary. While this may be possible in varying degrees in semi-industrialized developing countries and transition economies, the extent of readjustment required in less-developed economies, particularly LDCs, will be very substantial.

3. The potential gains from the Agreements, as reflected in the increased exports from particular countries, will largely depend on the competitive capability that either

^{1/} *Legal Instruments Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations*, done at Marrakesh on 15 April 1994, GATT Secretariat publication, sales no. GATT/1994-7.

^{2/} Background Paper IV/1, T. Murray, *Effects of the Uruguay Round Agreements on industrialization in developing countries*, (ID/WG.542/15(SPEC)).

^{3/} GATT, *An analysis of the proposed Uruguay Round Agreements with particular emphasis on aspects of interest to developing countries*, Geneva, November 1993.

^{4/} World Bank, *Global Economic Prospects and the Developing Countries*, Washington, D.C. 1995, Table 2-2.

exists or can be developed for particular products in the evolving situation of globalization and technological change. Competitiveness must, however, be structured within the framework of the Uruguay Round and its specific provisions not only for key sectors - such as agricultural products and textiles and clothing - but also for trade-related investment measures (TRIMs) and trade-related aspects of intellectual property rights (TRIPs), both of which are likely to have a considerable impact on industrial growth in developing countries. It is in this context that varying degrees of industrial restructuring will have to take place in industrial subsectors having the potential to generate exports if the developing countries are to enter the mainstream of international trade and global investment and technology flows.

4. In general, developing countries have lost a considerable degree of their preferential treatment in access to major markets as a result of the Agreements. However, this has been replaced by increased most-favoured-nation (MFN) market access (i.e. non-preferential), which provides considerable potential, provided successful export-oriented strategies and capability can be developed. Despite the expected increase in global trade, the short-term impact of the Agreements is likely to be marginal or negative for several developing countries, particularly LDCs and the ACP states, for whom the reduction in MFN tariff rates has to be offset against the preferential margins enjoyed by these countries in the European Union (EU), as well as preferential entry to industrialized-country markets under the generalized system of preferences (GSP). While longer periods have been prescribed for developing countries, particularly LDCs, to fulfil their obligations, and differential thresholds have been provided for certain commitments, particularly for LDCs, these measures are essentially short-term, time-bound palliatives that will only mitigate the impact of trade liberalization over a period of time, and not lessen its long-term implications. If developing countries are to avail themselves adequately of the positive effects of the Agreements, major changes will be necessary in their patterns of trade and their industrial structure. These changes may entail a substantial reappraisal and reorientation of industrial strategies, policies and programmes. This task is all the more necessary for ACP states, particularly the LDCs, where the negative effects are likely to be more pronounced. The general lowering of tariffs may provide only marginal benefits to these countries, since the present gap between the lower tariffs being paid by them under existing preferential agreements and those paid by other countries will also be substantially reduced over time.

5. The Uruguay Round Agreements have certainly engendered some optimism since tariff reduction and a set of precise rules and procedures (in areas such as subsidies, anti-dumping measures, and safeguards) are likely to improve market access, in the long run, for the products of developing countries.^{5/} With respect to the exports of manufactured goods from developing countries, which stood at \$700 billion in 1992, comprising 26 per cent of world manufactured exports, it is estimated that these exports should increase to \$1,180 billion by 2000 and \$1,490 by 2005, based on a projected annual growth of 6 per cent. With increased access to developed-country markets following the Agreements, it should be possible for manufactured exports to be substantially higher than the above estimates. However, the extent to which an increased volume of manufactured exports

^{5/} T. Murray, *op. cit.*

can be achieved by developing countries, including LDCs, depends on their pattern and structure of industrial growth in the immediate future. There is little alternative for these countries, as also for transition economies, but to conduct a detailed review of their present trading structure in the light of the Agreements and to consider a major industrial restructuring of their economies. This would be a difficult but unavoidable process.

I. PRINCIPAL ISSUES FOR CONSIDERATION

6. The principal issues for consideration with regard to global trade liberalization, and implications for industrial restructuring are the following:

(a) It is necessary to assess the overall impact of the Uruguay Round Agreements on the trading pattern and the effects on local industries in developing countries, including members of the African, Caribbean and Pacific Group (ACP states) and least developed countries (LDCs), in the light of the liberalization of imports, on the one hand, and increased access to developed-country markets, on the other. It should be considered whether the reduction in tariffs in developed countries will provide adequate access to such markets and whether such reductions will adequately offset losses on account of the erosion of preferential treatment for exports from the developing countries to major developed-country markets, particularly in the case of ACP states and LDCs;

(b) It is also necessary to assess the impact of the Agreements on the future trading pattern of transition economies at various stages of industrial development;

(c) It needs to be considered whether the benefits accruing from the Agreements can be drawn on adequately by developing countries, particularly LDCs, and by transition economies, and how their competitive production capability can be substantially increased in selected fields and subsectors. This would, however, require varying degrees of industrial restructuring, technological upgrading of products, processes and industrial operations, and adoption of export-oriented strategies in these countries during the period of transition;

(d) It needs to be assessed whether such industrial restructuring would require closer links and partnerships with foreign enterprises, especially with respect to participation in investment, technology and marketing arrangements and how such partnerships can be promoted;

(e) It should be considered whether the provisions relating to safeguards and anti-dumping in the Agreements would pose increased problems and constraints for manufactured exports from developing countries, including LDCs, and from transition economies;

(f) It requires to be considered whether the provisions in the Agreement on trade-related investment measures (TRIMs) on the non-imposition of performance requirements for foreign direct investment (FDI) would significantly reduce the positive effects of such FDI. And whether such provisions would result in increased difficulties

in negotiations between host countries and foreign investors. It also needs to be considered whether alternative measures might need to be adopted by host countries to ensure that the positive effects of FDI are maximized within the framework of the provisions of the Agreement;

(g) The impact of the provisions in the Agreement on trade-related aspects of intellectual property rights (TRIPs) on developing countries, including LDCs, and transition economies needs to be assessed, particularly for subsectors such as pharmaceuticals and biotechnology, together with the policies and measures necessary to mitigate any adverse effects;

(h) The implications of the phase-out of the Multi-Fibre Arrangement (MFA) over a 10-year period need to be assessed. Irrespective of the staging of such a phase-out, the policies and the measures necessary to be undertaken in the textiles and clothing subsector by developing countries, including LDCs, and transition economies during that period need to be assessed;

(i) A similar assessment needs to be made of the impact of the Uruguay Round Agreements on other manufacturing sectors, including those particularly affected such as agricultural products, pharmaceuticals, chemicals, leather, engineering goods;

(j) While it is recognized that high quality standard may be imposed by importing developed countries on exports of manufactured products from developing countries, the likely impact of application of any ecological or social standards for such products needs to be assessed;

(k) If increased competitive capability and substantial industrial restructuring is required on the part of developing countries, including LDCs, and transition economies, in order that they can avail themselves adequately of the benefits of the Agreements, it may be essential to conduct a detailed assessment, at the country level, of the likely implications and impact of the Uruguay Round Agreements and the potential for increased exports in selected fields and subsectors, together with the policies, institutional support systems and enterprise-level restructuring that may be necessary to achieve this objective.

II. BINDING AND REDUCTION OF TARIFFS

7. An important feature of the Agreements has been the binding of tariff levels. In the case of developing countries, the proportion of imports subject to bound tariffs will increase from 25 to 75 per cent of their total imports, while the bindings have been set mostly in a range of 22-35 per cent, which is substantially higher than in developed economies. At the same time, developing countries will have little scope for imposing quantitative restrictions on imports, which were often used both to protect local industries and to meet balance-of-payments requirements. In principle, quantitative restrictions would not be consistent with liberalized trading conditions and several developing countries have already undertaken autonomous trade liberalization as part of policy reforms in the context of structural adjustment programmes. It must, however,

be recognized that unrestricted imports will need to be offset by increased exports, both for balance-of-payments needs and for developing competitive industrial capability in selected fields. To the extent that infant industry protection is necessary for limited periods, particularly in LDCs, this measure may still be possible under the special provisions for these countries.

8. All tariff reductions under the Agreements are to be implemented within a five-year period. As against an average tariff reduction of 24 per cent by developing countries, with a minimum reduction by line of 10 per cent, the reduction in the MFN tariffs on industrial products in developed countries as a result of the Agreements, which will be phased in equally over five years, constitutes an average of 2.4 per cent or 38 per cent on a trade-weighted basis. Such reduction will, effectively, reduce tariff levels from 6.3 to 3.9 per cent. The impact of reduced MFN tariffs by developed countries will not, therefore, be significant in value for specific products because these were not imported in significant volumes by the OECD countries in the first place, though the percentage of reduction is quite high. The percentage of tariff reduction for various products varies, ranging from 3.8 per cent for automotive products in the United States of America to 100 per cent for office machines and other non-electrical machinery in Japan.

9. The highest percentage tariff cuts have occurred in metals, mineral products, precious stones, wood, paper, furniture and non-electrical machinery. Tariffs were reduced by an average of 60 to 70 per cent but from relatively low pre-Uruguay Round averages of less than 5 per cent. Developed countries have, at the same time, set escalated tariff schedules that discourage developing countries from the further processing of raw materials into higher-staged products.

10. While the average tariffs in developed countries are fairly low, certain exports from developing countries still attract high duties. These items include clothing and textiles, footwear and leather and rubber and leather goods, which face tariffs of more than 15 per cent. A reduction of 20 per cent in such rates should improve access to developed-country markets. The reduction in tariff escalation is particularly important in certain fields of processing such as hides and skins into leather; semi-manufactured lumber into wood articles; paper into paper products; jute fibres into yarn; raw tobacco into tobacco products and unwrought nickel, copper, aluminium, lead and tin into semi-manufactured products.

11. Estimates vary regarding the impact of the Agreements on tariff reductions. It is estimated that once these tariff reductions are implemented, the proportion of industrial products that enter developed-country markets under MFN zero duties from developing countries may double from 22-44 per cent. It is also estimated that duty-free access by developing countries will increase from 12 to 37 per cent of the value of imports to the United States; from 24 to 36 per cent of imports into the EU, and from 25 to 48 per cent of Japanese imports.^{6/} It must, however, be recognized that pre-

^{6/} UNCTAD, *A Preliminary Analysis of the Results of the Uruguay Round and their Effects on the Trading Prospects of Developing Countries*, 10 June 1994, Geneva, (TD/B/WG 4/13) p. 22.

Uruguay Round tariffs are generally quite low, averaging 6 per cent ad valorem. Viewed in this context, the tariff concessions offered by developed countries do not constitute a significantly new market access for developing countries, unless their products become intrinsically more competitive.

12. The real benefits of the Agreements to developing countries and transition economies lie in increased access to the markets of developed economies. A careful appraisal is needed of the tariff reductions in particular industrial subsectors along with the development of the competitive production and marketing capability to compete in these markets. Industrial enterprises in developing countries and transition economies, which have often been insulated from foreign competition, will not only need to face such competition in domestic markets but must compete in external markets. At the national level, import-substitution policies are being replaced by export-oriented strategies designed to provide policy and institutional support to local enterprises in order for them to become internationally competitive in selected fields. This may require varying degrees of industrial restructuring and technological upgrading of products and processes. It would also usually require closer linkages and partnerships with foreign enterprises not only for technology but for also marketing and in the development of production capability. External linkages will have to be structured, however, within the framework of the provisions of the Agreements relating to TRIMs and TRIPs.

III. SAFEGUARDS AND ANTI-DUMPING

13. The Agreements have incorporated important provisions relating to safeguards and anti-dumping. The imposition of new "grey area" measures, which related in particular to voluntary export restraints (VERs) has been prohibited and the elimination of all such measures, which extend to about 80 VERs enforced outside the textile and clothing sector, is required within four years. While most VERs extend to developed countries by other developed countries, VERs have also been applied to Brazil, China and the Republic of Korea with respect to footwear, travel goods and consumer electronics. Similarly, all safeguard measures adopted under article XIX of GATT will be terminated within eight years from the time of their adoption, or five years from the setting up of WTO. Important elements in the safeguards provision are that, first, the importing country must investigate the increase in exports and assess that this would cause serious injury to domestic industry; second, that safeguards would be applied on an MFN basis; and third, that these will be limited to the extent necessary. In the case of developing countries, these will not be applied against any individual country having less than 3 per cent imports unless all developing countries have a share of over 9 per cent. Developing countries can invoke safeguard measures for a longer period of time and also have shorter grace periods for the reimposition of a measure when no safeguard action is permitted. With respect to anti-dumping, the Agreements have set fairly detailed and transparent norms and provide a "sunset" clause set at five years. While the principles prescribed are useful, the use of "constructed values" has been allowed for price comparisons. This can well lead to protectionist abuse of anti-dumping provisions and it is likely that anti-dumping actions will increase in the future, both by developed

countries against developing economies and by developing countries becoming more active users of anti-dumping provisions.

IV. TRADE-RELATED INVESTMENT MEASURES

14. The TRIMs Agreement applies to investment measures related to trade in goods and to measures that are inconsistent with the provisions of GATT, article III on national treatment and article X on quantitative restrictions. Host countries retain the right to regulate FDI as long as the TRIMs Agreement is not infringed. Such infringement would apply to the imposition of requirements for local content, or for export, or the restriction of imports by an enterprise limited to its export performance or foreign exchange earning. In general, these performance requirements cannot be imposed on foreign investors. It is primarily this overall principle that has been defined in the Agreement; detailed guidance and interpretation would be provided by the TRIMs Committee once it comes into operation. For example, the situation of export-processing zones, where exportation is by definition mandatory, will need to be clarified.

15. There may be several measures in force in particular countries where the situation remains unclear as to whether the TRIMs provisions would be applicable or not. The TRIMs Agreement not only specifies measures that are mandatory or enforceable under domestic law or regulations, but also refers to obtaining an advantage which may not be limited to the measures concerned.

16. Member States of WTO are required to notify the WTO Council for Trade in Goods of all TRIMs of general or specific application which they are applying that are not in conformity with the provisions of the Agreement. Such TRIMs should be eliminated within two years of the date of entry into force of the WTO Agreement in the case of developed-country members. Developing countries are permitted five years, and LDCs seven years, for eliminating the prohibited TRIMs, but such periods could be extended in special circumstances. TRIMs can be applied to new investors in the transition period to ensure equal competitive advantage with existing investors subject to similar measures being used for like products.

17. The impact of TRIMs is likely to be fairly significant for developing countries and transition economies in their negotiations with foreign investors. Phased increase in local content and export commitments have been fairly extensively used in the process of negotiations between developing-country Governments and transnational corporations (TNCs), particularly in "assembly" industries but also in processing and resource-based industries. With the prohibition of such provisions, it will be necessary for host Governments to find alternative means of ensuring that the objectives of increased local content over time and development of export capability are achieved. The prohibitions under TRIMs may also result in higher import bills for sub-assemblies, components and spares, which will need to be compensated by export earnings from other sources. This may either necessitate adjustments and restructuring of production activities of local enterprises or promotion of new investments over a much wider range of activities in the fields concerned. It may also result in greater emphasis on technological and marketing partnerships between local and foreign enterprises than on FDI through TNCs in

developing countries and transition economies where conditions exist for such alternative foreign participation.

V. TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS

18. The Agreement on TRIPs is designed to enforce new rules and disciplines with respect to intellectual property rights (IPRs). The Agreement sets minimum universal standards for patents, copyrights, trademarks, industrial designs, geographical indications, circuits and undisclosed information, including trade secrets, for the first time as a category of intellectual property. The Agreement also provides a number of rules on restrictive practices in licensing contracts and recognizes that certain practices may restrain competition or may impede the transfer of technology. In general, however, only a few practices can be deemed to be restrictive.

19. The Agreement on TRIPs is likely to have a far-reaching impact on technology transfer to developing countries, especially in certain sectors, including new technologies, where IPRs assume a major dimension. Since most technological innovations and IPRs are sourced in developed countries, the Agreement on TRIPs is primarily designed to protect the interests of holders of IPRs in these countries. At the same time, the need for a harmonized system of protection of IPRs needs to be recognized, with the growing importance of technology in the development of competitiveness.

20. The effects of the Agreement on TRIPs will be felt in all sectors where IPRs are operative, but particularly so in the pharmaceutical^{7/} and chemical industries and in biotechnology development where the impact on developing countries is likely to be most significant. Developing-country firms will need to acquire usage rights to patented processes and products, through licensing. Such licensing may not, however, be available, except at a very high cost, even for vital items such as improved seeds through biotechnological processes, or essential pharmaceutical products. The non-use of expanded patent rights in developing countries may be perpetuated. The inclusion of undisclosed information, including trade secrets and test data, under IPRs covered by TRIPs opens up a new area of protection of IPRs and may become a source of friction.

21. The TRIPs Agreement poses a major challenge to developing countries and transition economies, particularly with respect to technology upgrading. To a limited extent, the "compulsory licensing" provisions in the Agreement can be utilized, but these have also been made operationally more difficult, since non-use of the patent is no longer a valid criterion. What will be necessary is to stimulate and promote local R & D for technology upgrading and adaptation through research institutions, universities and production enterprises in developing countries and transition economies to a much greater extent and, at the same time, to promote technological and research linkages with holders of IPRs in developed economies. It should be possible for research institutes

^{7/} Background Papers IV/3a-d, *Sectoral impact of the Uruguay Round Agreements on developing countries: Textiles, engineering goods, leather industry, and pharmaceutical industry* (ID/WG.542/17-20(SPEC.)), respectively.

and universities in developing countries to avail themselves of the TRIPs exception relating to the non-commercial use of intellectual property. Enterprises in developing countries and transition economies may also need to negotiate joint research activities in new fields with patent-holding enterprises in developed countries, both for the use of existing patents and the development of new products and processes. Low research costs in these countries can serve as an important inducement for research partnerships in wide-ranging fields such as biotechnology, pharmaceuticals and software development. The scope of licensing agreements should be sought to be expanded so as not only to cover usage of patents or other IPRs but also to cover research activities in particular fields in developing countries and transition economies, so that technology upgrading can be accelerated in the interest of the parties concerned.

VI. QUALITY, ECOLOGICAL AND SOCIAL CONSIDERATIONS

22. There are three issues that may constrain an increase in manufactured exports from developing countries and transition economies. The first relates to the high quality of imported products which may be insisted upon by industrialized countries. Certification under ISO 9000 will be increasingly necessary. Second, this is being further extended to ISO 14000, prescribing ecological standards and appropriate environmental conditions for several traded products. The third issue may relate to the proposed "social" clause, with trade barriers being raised against products that are manufactured under undesirable social conditions. There may be considerable controversy if social or environmental conditions are sought to be imposed, since these can have a considerable adverse impact on competitive export capability in developing countries.

VII. PHASE-OUT OF THE MULTI-FIBRE ARRANGEMENT

23. The most direct impact of the Agreements on industrialization in developing countries will be the phasing out of the Multi-Fibre Arrangement (MFA) over 10 years, when clothing and textiles will be integrated into the WTO and subject only to tariffs, instead of the present system of quotas. The textile industry constitutes a critical area of growth for developing countries and for LDCs and the quotas imposed on exports of clothing and textiles, including through the MFA since 1973, have severely restricted exports in this subsector, where developing countries possess a significant comparative advantage. The phasing out of the MFA will, however, be spread over 10 years. The first step requires the integration of each country's imports in the principal four categories of tops and yarns, fabrics, made-up textiles, and clothing to the extent of 16 per cent of total imports; the second step should cover an additional 17 per cent in three years; the third step should extend to an additional 18 per cent in four years, while the fourth step must cover integration of the remaining 49 per cent of imports of textiles and apparel.

24. It is highly probable that the most import sensitive areas under this subsector will be left to the fourth stage and, consequently, the impact of the phase-out in the first three stages will be fairly limited. Nevertheless, the ultimate phase out of the MFA undoubtedly constitutes an important development in a key industrial subsector for

developing countries. The gains from the elimination of the MFA will not be evenly spread among developing countries. While overall developing-country exports may increase by 78 per cent in the case of textiles and 135 per cent for apparel, advantages will largely accrue to certain Asian countries, while exports from ACP states may be adversely affected unless competitive production capability can be established in these countries.

25. It is important that the transition period should be utilized by developing countries and transition economies to restructure their textile industry and production of garments, so that their existing comparative advantage can be maintained. This would, for example, require the introduction and absorption of major technological developments in textile production and finishing and the blending of computer-aided design (CAD) with traditional processes in garment manufacture. The transition period under the MFA must certainly be utilized by developing-country manufacturers in these countries to further upgrade textile and clothing production, through improved technologies and automated processes. Unless developing countries, particularly LDCs, are also able to ensure technology upgrading in this subsector, the advantages of the MFA phase-out will not be fully realized. It is also necessary to consider, in this context, whether investment, technological and marketing partnerships between major textile manufacturers in developed countries and those in less developed economies would not significantly improve the prospects of increased textile and clothing exports from developing countries, both after the MFA phase-out and during the transition period.

26. In any event, substantial restructuring of the textile and clothing industry will be necessary. In countries, such as Bangladesh, where garment exports have increased rapidly, there is a need for backward integration and modernization of the textile industry. The potential for garment production and certain textile products for export is also high in African countries and in the island economies of the Pacific and the Caribbean. Technological partnerships between enterprises in these countries and other developing areas and countries such as Hong Kong, Singapore, India and Pakistan also have considerable potential and need to be initiated, so that less developed economies, particularly LDCs, can take adequate advantage of the MFA phase-out.

VIII. AGRICULTURAL AND AGRO-BASED PRODUCTS

27. Agricultural products have been included for the first time under international trade disciplines, and a six-year phase-in period has been provided, extended to 10 years for developing countries. Most of the provisions, however, relate to agricultural commodities, though certain processed products are also included, such as cheese and wines, etc. The agreed liberalizations and reductions in subsidies are not large and are unlikely to have a significant impact on agro-based industries in developing countries. For agricultural products, market access to developed-country markets will be limited because of high tariffs, particularly in the EU except where preferential treatment is still granted to ACP states as, for example, in the Protocol on ACP sugar of the Lomé Convention. Net food importers, particularly LDCs, are likely to face a much greater burden because of higher international food prices.

IX. OTHER INDUSTRIAL SUBSECTORS

A. Pharmaceuticals

28. The Agreement on TRIPs is likely to have a negative impact on developing countries, particularly on pharmaceuticals and chemicals covered by patents and IPRs.^{8/} Under this Agreement, countries are obliged to provide patent protection to both processes and products in all fields, including pharmaceuticals. Such patent protection will be for a period of 20 years. The only items excluded are diagnostic, therapeutic and surgical methods of treatment for humans, animals and plants, other than micro-organisms and essentially biological processes for their production. There can also be no discrimination with respect to the place of invention, the field of technology and whether products are imported or locally produced. Compulsory licensing has been provided for, but has been subjected to many restrictive conditions. Once the TRIPs Agreement comes into force, countries will be obliged to accept applications for patent protection of pharmaceutical and agricultural chemical products without the benefit of the 10-year transition period. This means that once patents are granted, domestic companies will not be able to continue to produce or market patented drugs without a licence from the patent holder.

29. A large proportion of pharmaceutical production in developing countries, which comprises 18 per cent of global production, is dominated by TNCs. It is only in a few countries such as Argentina, Chile and India that the production of domestic companies exceeds 40 per cent. The principal impact of the TRIPs Agreement would be either to deny or to decrease the use of patented drugs in developing countries or to accept substantially increased prices of such drugs. This increase could be in the order of 70-75 per cent or more, but it would be difficult to determine a fair price.

30. The impact of the TRIPs Agreement will undoubtedly have an adverse impact on the pharmaceutical subsector in developing countries, as also in transition economies, since the basic structure of the industry would be affected. It would be necessary for these countries to restructure their domestic industry to concentrate and expand research activities for new patentable products and to compete effectively in the generic drugs market. There is also considerable potential for technological and research partnerships with international consortia. Several developing countries have significant comparative advantages in pharmaceutical research. These should be fully utilized under the initiative of private-sector companies, but with the full support of the State.

B. Biotechnology

31. What is true of pharmaceuticals is equally applicable to the much wider field of biotechnology, where the impact of the TRIPs Agreement is also likely to be quite far-reaching and applicable extensively to patentable processes for both health and agricultural products. The biotechnology sector will require major review and restructuring in most developing countries where biotechnological activities have been

^{8/} Background papers IV/3a-d, *op. cit.*

undertaken. Increased emphasis is necessary on biotechnological research both in research institutions and universities and at the enterprise level in developing countries to develop processes and products that can be patented. The role of the International Centre for Genetic Engineering and Biotechnology (ICGEB) is of special significance as it can provide an effective lead in research in this field. It may also be necessary to promote cooperation in research activities between developing countries and regions on different aspects of biotechnology and genetic engineering.

C. Engineering goods

32. This is a heterogeneous group of manufactured goods covering light and heavy engineering products; electrical and non-electrical equipment and products; electronics equipment; automotive and transport machinery; agricultural machinery; machine tools and other capital goods. The production of engineering goods has increased considerably in a number of developing countries, while the production capacity in transition economies continues to be high in most machine-building subsectors. Export capability in developing countries and transition economies has, however, been fairly limited, except in South-East Asian countries and in some Latin American countries, particularly Brazil and Mexico. Competitiveness in this field has been significantly affected by technological innovations, particularly flexible manufacturing systems and related quality management and controls.

33. The impact of the Agreements on engineering goods manufacture in developing countries and transition economies is likely to be fairly positive and may be reflected in increased market access as a result of reduced tariffs.^{9/} The overall reduction in MFN tariffs on industrial products in developed countries is 38 per cent on a trade-weighted basis, the reduction being from 6.3 per cent to 3.9 per cent. The reductions vary for different products. While the extent of tariff reductions for particular products or specific categories of engineering goods is not high and may even tend to be marginal, the Agreements offer scope for increased market access. The anti-dumping provisions incorporated in the Agreements will also serve to make the system more transparent and predictable and should be of advantage to developing-country exporters.

D. Leather and footwear

34. Leather products comprise raw hides and skins, finished leather, footwear and components and clothing accessories.^{10/} Exports of leather products from developing countries rose to over \$48.5 billion in 1992, with footwear constituting the fastest-growing segment. The fastest growing developing-economy exporters have been India, the Republic of Korea, Thailand, Taiwan Province, China and Hong Kong. China's export growth has been the most rapid, exceeding \$3.9 billion a year.

^{9/} *Ibid.*

^{10/} *Ibid.*

35. The reduction of tariffs as a result of the Agreements is expected to provide impetus for increased leather and footwear exports from developing countries. The reduction in trade-weighted tariffs for leather and footwear amounts to 24.3 per cent in the case of Canada, 14.7 per cent for the EU, 13.3 per cent for Japan and 9.1 per cent for the United States, percentages that are below the average reduction of 40 per cent on all industrial products. The problem of tariff escalation also remains. However, the reductions in tariff do provide increased market access to some extent. In the immediate future, the principal beneficiaries from the Agreements in this subsector will be exporters of leather, rubber, footwear and travel goods, and exporters of tanned leather, who will gain from reduced tariffs. It will, however, be necessary for developing countries, particularly the LDCs, to restructure their leather and footwear industries through the promotion of new investment and upgrading technological applications and processes in this field.

36. In most other industrial subsectors, the impact of the Agreements has to be viewed as being marginally positive because the reductions in average tariffs allow increased access to developed-country markets. The extent of tariff reductions is, however, relatively small and it will be necessary to ensure greater competitiveness not only *vis-à-vis* developed-country enterprises but between enterprises from different developing countries and regions.

X. SERVICES

37. The Agreements include a General Agreement on Trade in Services (GATS), covering cross-border trade, usually by way of movement of information; the movement of consumers (tourism); the establishment of service facilities in a foreign country and the movement of persons to provide services. There is universal coverage of sectors that include tourism, business services, value-added communications, and financial services. The general framework of GATS is structured around the MFN provision and countries are allowed to seek time-bound sectoral exemptions from MFN treatment. One of the annexes deals with the movement of labour across borders and developing countries could take advantage of labour-intensive services where they have a comparative advantage. In general, however, the provisions under GATS are unlikely to have a major impact on developing countries in the near future.^{11/}

XI. NEED FOR INDUSTRIAL RESTRUCTURING

38. The impact of the Agreements is likely to be fairly extensive and far-reaching and necessitates a detailed review of their effects on various production sectors and for selected services in every developing country and transition economy. On the one hand, a liberalized global trading régime, backed by an international body such as WTO, committed to reductions in tariffs and providing increased access to the markets of

^{11/} T. Murray, *op. cit.*

developed countries, offers considerable potential for the growth of exports of manufactured products and selected services from developing countries and transition economies. At the same time, the liberalization of imports by these countries requires a concomitant increase in exports. On the other hand, the restrictions imposed under the Agreements on TRIMs and TRIPs will necessitate new strategies and a framework of policies and institutional support systems so that these countries can take full advantage of the potential and benefits accruing from the Agreements. The time span provided to developing countries and to LDCs to meet their obligations and commitments must be utilized to develop an effective strategy for industrial restructuring to ensure the rapid growth of export-oriented production. A major prerequisite is increased competitive capability, based on appropriate technology usage and introduction and maintenance of quality control and standardization. The nature of competitive technologies to be utilized in various industrial subsectors may differ in countries with varying factor conditions and levels of development. It is, however, necessary to ensure that local enterprises are increasingly geared towards export-oriented production and that the necessary policy framework and institutional support systems are put in place.

39. An increasingly vital element is the need for closer technological and marketing linkages between local enterprises in developing countries and transition economies and foreign companies, ranging from large TNCs to small and medium enterprises (SMEs), in developed economies. With the Agreements designed to promote greater globalization and interdependence between both developed and developing countries, increased cooperation and industrial partnerships between enterprises in different countries are essential.

40. For semi-industrialized developing countries, the Agreements represent a considerable challenge and opportunity, provided effective restructuring of industry can be achieved to ensure increased exports. This may necessitate further review of promotional policies on FDI but, more importantly, it will be necessary for private-sector entities in these countries to take the lead and promote technological and marketing relationships with foreign firms. At the same time, promotional policies and institutional support systems must ensure that rapid growth of local SMEs takes place, in order that a competitive horizontal production capability can be developed in various production and service sectors. For transition economies also, the Agreements provide considerable potential for increased access to developed-country markets. With their considerable industrial experience and pool of scientific and technological talent, several transition economies are in a position to develop a competitive capability fairly rapidly, provided new production technologies and organizational and management techniques can be acquired and absorbed and external linkages effectively developed.

XII. AFRICAN, CARIBBEAN AND PACIFIC COUNTRIES

41. In the case of the ACP states, comprising half the world's developing economies, preferential entry to EU markets under the Lomé Convention has had little impact on industrial growth: while exports of processed goods rose by 4.4 per cent between 1976 and 1993, imports into the EU fell from 2.6 per cent of the total to 1.1 per cent. Preference is also provided under the GSP by other industrialized countries, particularly

the United States and Japan. Caribbean countries enjoy free entry to the United States for most products under the Caribbean Basin Initiative (CBI) although there must be a minimum of 35 per cent value-added in the exporting country. The Agreements may not be of immediate benefit to ACP states exporting largely agricultural products, since trade may be diverted away to other developing countries.¹² It is estimated that losses to ACP states as a result of preference erosion will amount to \$317 million or 2.5 per cent of their exports of industrial products to member States of the OECD. Several ACP states will lose their market share, including possibly Jamaica and Mauritius and some of the smaller countries, such as Benin, Burkina Faso, Chad and Mali. It will be necessary for ACP states to undertake an extensive restructuring of their agro-processing and agro-based production in order both to offset the decline in exports as a result of the erosion of preferential arrangements and to achieve increased export capability during the next decade. The textile and clothing sector has considerable potential in these countries, as do several other agro-based industries, including leather and textile products, horticulture, fruits and vegetables, fish, meat, wines and rum. It will be necessary, however, to undertake a detailed analysis of the potential exports of manufactured products and of services ranging from tourism to data processing from each country and determine the policy and institutional requirements for local enterprises to achieve increased export capability.

42. There is considerable long term potential for ACP states to benefit indirectly from the expected positive impact of the Agreements on global trade liberalization and also to gain from improved access to non-EU markets and from increased South-South trade. This will, however, largely depend on the extent to which industrial enterprises in these countries can be restructured towards export-oriented production in the industrial sectors in which these countries continue to have a relative comparative advantage.

XIII. REGIONAL TRADING GROUPS AND THE AGREEMENTS

43. An important issue relates to the relationship between the expanding role of regional trading groups and the global trading system envisaged under the Uruguay Round Agreements. Regional integration agreements, which primarily relate to customs unions and free-trade areas, have increased considerably in number, as also in their role and coverage, with the EU being a prime example. Such agreements should complement the new trading system set up through the WTO and also be mutually supportive. The MFN clause, which is an essential feature of the Agreements, is intended to ensure that trade commitments are applied by each country to its trading partners in a uniform and non-discriminatory manner. While regional agreements should facilitate trade among the countries concerned, they should not create barriers to trade with countries outside the region. The provisions under article XXIV of GATT prescribe the conditions to be met by customs unions and free-trade areas in order to avoid adverse effects on trade with third countries. The Multilateral Agreement on Trade in Goods reproduce existing

^{12/} Background paper IV/2, Adrian Hewitt, Antonique Koning and Michael Davenport, *The impact of the Uruguay Round Agreements on manufactured products of the African, Caribbean and Pacific Group* (ID/WG.542/16(SPEC.)).

GATT provisions on customs unions and free-trade areas, while similar provisions have been incorporated with respect to services in article V of the GATs Agreement.

44. For developing countries, regional trading agreements have served a useful but limited purpose so far, though some and particularly the Southern Cone Common Market Treaty (MERCOSUR) have resulted in a considerable increase in trade among member countries. As a result of the liberalized trading conditions under the Uruguay Round Agreements, regional agreements should not pose constraints on exports to any group of countries and may even complement the Agreements.