



Distr.
GENERAL
GC.10/14
20 October 2003

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

GENERAL CONFERENCE

Tenth session
Vienna, 1-5 December 2003
Item 12 of the provisional agenda

MEDIUM-TERM PROGRAMME FRAMEWORK, 2004-2007

Proposals of the Director-General

Provides a comprehensive proposal for proposed activities in the forthcoming medium-term programme framework period, 2004-2007, as foreseen in document GC.10/5, para. 4.

CONTENTS

	<i>Paragraphs</i>	<i>Page</i>
Introduction	1	2
Chapter		
I. DEVELOPMENTS DETERMINING THE MTPF, 2004-2007	2 - 10	2
II. PROGRAMME FOR THE MEDIUM TERM, 2004-2007: THE UNIDO RESPONSE	11 - 38	3
A. The UNIDO corporate strategy	11 - 17	3
B. Operationalizing the corporate strategy	18 - 21	4
C. Areas of emphasis for the medium term, 2004-2007	22 - 38	5
Investment promotion	23 - 24	5
Technology transfer, diffusion and management	25 - 29	5
Trade facilitation and market access	30 - 31	6
Private sector enterprise development	32 - 35	7
Multilateral environmental agreements	36 - 38	7
III. OTHER CONSIDERATIONS	39 - 41	8
IV. ACTION REQUIRED OF THE CONFERENCE	42	8
Annex DEVELOPING INDUSTRY: PRODUCTIVITY ENHANCEMENT FOR SOCIAL ADVANCE UNIDO'S CORPORATE STRATEGY		9

For reasons of economy, this document has been printed in a limited number. Delegates are kindly requested to bring their copies of documents to meetings.

Introduction

1. In accordance with established practice and as anticipated in document GC.10/5, paragraph 4, the present document provides a comprehensive proposal for the medium-term programme framework (MTPF), 2004-2007. To place this proposal in its correct setting, this note begins with a few apposite references to the prevailing policy context and UNIDO's experience in programme implementation during the past five years. It then outlines UNIDO's response in the form of the recently-formulated corporate strategy and discusses the areas of emphasis for UNIDO's activities in 2004-2007 arising therefrom. Finally, it concludes with a brief review of other organizational and institutional considerations for the implementation of the MTPF for 2004-2007.

I. DEVELOPMENTS DETERMINING THE MTPF, 2004-2007

2. The strategy and content of the medium-term programme framework, 2004-2007, have been primarily determined by the policy guidelines and prescriptions given by the Member States from time to time. Additionally, the international development goals set by the international community through conferences, declarations and international agreements, especially environmental agreements, the global economic, industrial and technological trends and finally the experience gathered from the implementation of the development programmes and projects by the organizations have also shaped MTPF 2004-2007.

3. To begin with, there is the *Business Plan for the Future Role and Functions of UNIDO*, endorsed by the General Conference in resolution GC.7/Res.1 on 4 December 1997. The Business Plan required UNIDO to undertake both technical cooperation and global forum activities for strengthening industrial capacities in the developing countries and transition economies and for promoting sustainable industrial development. While maintaining its universal character, the Organization is to focus its activities in the least developed countries (LDCs), in particular in Africa, and on agro- and small industries. The Business Plan also emphasized that UNIDO should provide its support primarily in comprehensive packages of integrated services and should further strengthen its capacity in this regard through interdisciplinary team-building.

4. The assiduous implementation of the programmatic components of the Business Plan and the associated administrative reforms during the past six years have resulted in significant improvements in UNIDO's performance, which have been widely acknowledged by the Member States and independent

observers. Such recognition has been expressed not only in various statements issued in successive meetings of the governing bodies, but also in a number of reports on the Organization prepared in recent years. Thus, the report of the External Auditor presented to the eighteenth session of the Programme and Budget Committee in September 2002 stressed that UNIDO had achieved relevance, financial stability, improved technical cooperation delivery and quality of services offered through more focused activities (PBC.18/3-IDB.26/2). Similarly, the Institutional Strategy Paper *Working in Partnership with the United Nations Industrial Development Organization 2001-2005* prepared by the United Kingdom Department for International Development in June 2001, stated that "UNIDO has made significant changes to modernize management practices. UNIDO's progress with reform sets a good example for other UN agencies".

5. While reiterating the continuing validity of the Business Plan, the Member States have recognized the need for UNIDO to adapt its functions and priorities and orient its activities to the new realities and requirements of the changing global economic environment. It was in this spirit that the Industrial Development Board at its twenty-sixth session adopted the *Strategic guidelines—Towards improved UNIDO programme delivery* in decision IDB.26/Dec.7 on 21 November 2002. This decision requested the Director-General to take the strategic guidelines fully into account when developing his proposals for the MTPF for 2004-2007.

6. UNIDO is also required to give particular attention to major United Nations development initiatives when formulating its future activities in order to ensure that the Organization makes the most effective contribution to the international development goals and those of the beneficiary States. In this context the Millennium Development Goals (MDGs), which emerged out of the United Nations Millennium Summit of world leaders held in September 2000, are of particular importance. In respect of UNIDO's activities, the goals relating to eradication of poverty, ensuring environmental sustainability, developing global partnership for development and promoting gender equality and empowering women are very relevant. Other major initiatives, which must be factored into UNIDO's medium-term development programme are the Plan of Implementation adopted by the World Summit on Sustainable Development (WSSD), held in September 2002 at Johannesburg; the priorities established by the New Partnership for Africa's Development (NEPAD); the findings and recommendations of the final report of the Commission on Human Security (May 2003); and the national development objectives articulated in the United Nations Development Assistance Framework (UNDAF) prepared for various countries.

7. UNIDO's activities in 2004-2007 will also continue to be guided by a number of multilateral environmental agreements, which impinge on the industrial sector and in the implementation of which UNIDO has been assigned a specific role. These agreements include: The Montreal Protocol on Substances that Deplete the Ozone Layer; the Kyoto Protocol to the United Nations Framework Convention on Climate Change; the Cartagena Protocol on Biosafety; and the Stockholm Convention on Persistent Organic Pollutants (POPs). In addition, UNIDO undertakes various activities funded by the Global Environment Facility (GEF) in the six areas addressed by GEF, which include not only the ozone layer, climate change and POPs covered by the agreements listed above, but also biodiversity and international waters.

8. In addition to the Business Plan, strategic guidelines, and the mandates arising from various international conferences and agreements, the formulation of the MTPF for 2004-2007 has also been guided by specific decisions taken by UNIDO's governing bodies. Decision IDB.27/Dec.9 has been particularly relevant in this context, and calls on UNIDO to take into account the Programme of Action for the Least Developed Countries for the Decade 2001-2010 adopted by the Third United Nations Conference on the Least Developed Countries, held in Brussels from 14 to 20 May 2001, in its programme activities.

9. The preparation of the MTPF for 2004-2007 has also been informed by an appreciation of global economic, industrial and technological trends, and their implications for the support services provided by UNIDO in developing countries and countries with economies in transition. In particular, the ongoing process of globalization will pose continuing challenges for UNIDO to assist these countries to take full advantage of the opportunities offered by the potential access to global markets. Similarly, UNIDO will also be called upon to play an increasingly active role in helping these countries to acquire, adopt and assimilate the rapidly advancing industrial technologies, including such "new" technologies as information and communications technologies, biotechnology and nanotechnology, which will be gaining increasing importance in the coming years.

10. In formulating the MTPF for 2004-2007, UNIDO has also taken into account its own experience of delivering its technical cooperation services during the past five years through such mechanisms as integrated programmes and country service frameworks, individual projects, and thematic initiatives. In almost all cases it has been found that activities leading to an increase in productivity have been the most sustainable. This finding has also been reinforced by broader international experience.

II. PROGRAMME FOR THE MEDIUM TERM, 2004-2007: THE UNIDO RESPONSE

A. The UNIDO corporate strategy

11. UNIDO has responded to the mandates given by its Member States, both directly through its governing bodies and indirectly through the goals set by international conferences and agreements, and to the needs arising from international economic, industrial and technological developments, by formulating a comprehensive and coherent corporate strategy, as reproduced in the annex to the present document. This strategy, which was circulated to Member States at the twenty-seventh session of the Industrial Development Board in August 2003, reflects the pragmatic approach towards development adopted by UNIDO on the basis of the development experience of the past 50 years, and transcends economic or political orthodoxy.

12. The UNIDO corporate strategy rests on the premise, derived from empirical research and experience, that productivity enhancement, driven by improved skills, increased knowledge and upgraded technology, plays a crucial role in promoting faster growth. While acknowledging that productivity enhancement is an economy-wide concept, which will require adjustments and improvements not only in individual economic sectors but also in such areas as governance, infrastructure and social development, UNIDO is nevertheless convinced that industry can make an important contribution to the achievement of this increase in productivity. UNIDO therefore proposes a new approach for the Organization's activities and interventions, which focuses on productivity growth as the central theme for these interventions, both to optimize their effectiveness and provide the needed strategic fit between them. This new approach is aimed at promoting sustainable industrial development by reinforcing the multiple links between entrepreneurship, technology, productivity enhancement and growth, and at facilitating a better conceptual and operational design of the Organization's support services. In adopting this approach, UNIDO intends to achieve a sharper focus and enhanced effectiveness in the deployment of the experience and expertise of its staff.

13. It may be noted in this connection that UNIDO has developed a methodology for measuring and tracking changes in total factor productivity in various countries and regions. This methodology, which has gained the recognition of outstanding economic journals, allows UNIDO to compare practices in selected countries and regions with best practice productivity-enhancing measures in terms of skills and technology development, and to assist in replicating the lessons learned from these experiences in other countries.

14. Based on the underlying strategy of productivity enhancement for social advance, UNIDO will seek, in the coming years, to attain an effective integration between the conceptualization of the current policy challenges facing developing countries and transition economies, and its approach to technical cooperation on the ground. In this sense, an effort will be made to achieve a much greater synergy between the global forum and technical cooperation functions than in the past, with the global forum function serving to identify topical areas of need for UNIDO's technical cooperation in developing countries and countries with economies in transition, and the technical cooperation function helping both to provide inputs for the global forum function and to identify gaps in UNIDO's global forum activities. Consequently, the global forum and technical cooperation activities will increasingly reinforce each other in the quest for relevance, effectiveness and impact.

15. With regard to the **global forum function**, the corporate strategy notes that in its capacity as the specialized agency of the United Nations mandated to promote industrial development, UNIDO must generate and disseminate knowledge about industrial development processes and associated issues, and initiate/conduct debates on industrial development and related matters in order to influence the industrial development agenda in this area. The global forum function also involves benchmarking industrial performance and identifying international best practices for dissemination; organizing the exchange of sector- and theme-specific information and views of experts and decision makers from different countries and regions; and disseminating knowledge on current and emerging trends, challenges and opportunities to inform policy-making. In doing so, UNIDO's global forum activities draw upon in-house and collaborative research as well as the rich pool of experiences generated by its technical cooperation programmes.

16. With regard to UNIDO's **technical cooperation activities**, the corporate strategy provides for the Organization's interventions to be clustered around two key areas of comparative advantage:

- Technology diffusion;
- Capacity-building for market access and development.

While such a separation of UNIDO services is analytically convenient, it must be borne in mind that there are important synergies between the activities and respective outcomes in these two areas.

17. In these two areas, focus on LDCs and the poor will continue to be stressed and sharpened, seeking tangible contributions to the fight for poverty reduction and social and economic progress. Environmental

sustainability of industrial development will also be an essential ingredient through the emphasis on clean technologies and cleaner production practices. By this approach UNIDO will seek to use industrial development as a useful mechanism for contributing to the achievement of MDGs.

B. Operationalizing the corporate strategy

18. In order to pave the way for a successful implementation of the corporate strategy during the period 2004-2007, UNIDO has recently undertaken a comprehensive analysis of the further adjustments to its services and delivery mechanisms required to improve the performance and impact of its activities. This analysis has addressed three issues in particular:

- An improvement in the linkages between UNIDO's global forum and technical cooperation activities in order to enhance the Organization's participation in, and contributions to, the international development debate, and to determine critical areas for its technical cooperation services;
- A refinement of the technical support services offered by UNIDO to align them more effectively with the global development priorities;
- Increased redeployment of authority and responsibilities for technical cooperation activities to the field in order to enhance the field-level impact of these activities.

19. The examination of the linkages between UNIDO's global forum and technical cooperation activities has resulted in a proposal to establish a core research agenda covering five interrelated topics:

- How best to foster and monitor the contribution of productivity growth to economic and social advancement?
- What is the impact of the new global setting in such areas as trade, investment and international regulations on the scope of industrial development policies and on the effective contribution of industry to economy-wide productivity growth and to the achievement of the MDGs?
- What are the key barriers to speeding up the transfer, diffusion and absorption of technology and how best to remove them with a view to enhancing productivity growth in developing countries?
- How to maximize the developmental impact of entrepreneurship and SMEs?
- Which are the most efficacious policy tools and forms of industrial governance to promote and

support industrial development in the new global setting?

This core research programme will be supplemented by other global forum activities as necessary to complement UNIDO's technical cooperation activities.

20. The reassessment of UNIDO's technical support services has resulted in a thorough review of the Organization's eight service modules to make them more consistent with the global development priorities, and the MDGs in particular. Their modus operandi has also been adjusted to align their outputs more closely to the central theme of productivity enhancement enunciated in the corporate strategy, and in this way to increase the synergies and strategic fit between them. These revised service modules, which will remain the basic building blocks of UNIDO's technical cooperation activities, are presented in a separate conference room paper, along with an outline of the priority services for the period 2004-2007.

21. The assessment of the prospects for an increased redeployment of authority for managing and implementing technical cooperation projects to the field has resulted in several new proposals being articulated for a greater decentralization of UNIDO's activities. These are presented in greater detail in a separate document. It may be mentioned that the emphasis on decentralization is clearly in line with the corporate strategy's goal of productivity enhancement for social advance. Recognizing that UNIDO's support for productivity increases through the promotion of industrial development in the relatively poor areas of any given country is the most effective and sustainable means of alleviating poverty, the decentralization approach seeks to shift UNIDO resources to the field where they are needed most.

C. Areas of emphasis for the medium term, 2004-2007

22. As indicated above, UNIDO has responded to the demands placed upon its services by its Member States and the evolving international development agenda by formulating a comprehensive corporate strategy focused on the central theme of productivity enhancement for growth and social advance. In addition, UNIDO has refined its service modules in accordance with these requirements to ensure that they meet the full needs of the Member States, in particular within the framework of the MDGs. While the full range of UNIDO services to be provided to developing countries and transition economies in the period 2004-2007 is given in these service modules, particular emphasis will be placed on interventions that contribute to the strengthening of productive capacities and enhancement of productivity growth, on the basis of technology upgrading, learning and technological progress. This will ensure

competitiveness and long-term and sustainable economic growth, which alone can make a decisive dent on poverty in these countries. The areas of emphasis in the medium term 2004-2007 in the Organization's technical assistance and global forum activities that emerge from this approach are outlined below.

Investment promotion

23. One of the key drivers of productivity is investment in machinery and equipment, which carries with it new technologies and new ideas that contribute to higher productivity and growth. Technological change often manifests itself in new capital goods, so that capital accumulation becomes the vehicle of technological progress and productivity enhancement. In this context, promotion of investment, both domestic and foreign, is of crucial importance. Foreign direct investment (FDI) in particular, is regarded as an important driver of industrial performance as it is expected to directly improve the productivity growth of industries by infusing new capital, technologies and managerial know-how and by improving the average skills and efficiency levels of industry.

24. UNIDO will assist the developing countries and transition economies in developing a positive investment climate by advising them on international best practices and experiences in industrial development investment promotion and effective industrial policies and strategies. In designing its support services UNIDO's objective will be to help the beneficiary countries tackle both government and market failures in an effective manner. For example, the measures to tackle government-imposed imperfections could include policy advice to ease arbitrary regulations and licensing requirements, proper functioning of the labour market and appropriate measures for facilitating the exit of non-viable firms. In respect of market failures, support services will relate to informational constraints, such as the provision of information on modern technologies and skills development, as well as best practices in technology upgrading and adaptation. The Investment and Technology Promotion Office (ITPO) network will be utilized effectively to promote FDI through the promotion of business and marketing alliances between the enterprises in the developing countries and those in the advanced industrial economies, including multi-national corporations.

Technology transfer, diffusion and management

25. Growing productivity is the engine of development and productivity, in turn, is primarily driven by technological progress, upgrading and diffusion. This area of emphasis is, therefore, at the core of UNIDO's corporate strategy. Technological efforts—organization, management and upgrading of technology—are critical to the industrialization of the

developing countries and transition economies. However, the distribution of the sources and the application of technological knowledge show a highly asymmetric pattern with the industrialized countries producing the lion's share of technology and scientific innovation in terms of patents and royalties from licensing. As shown in the UNIDO *Industrial Development Report 2002/2003*, the developing countries in general and the least developed countries in particular lag far behind in contributing to the global stock of technological knowledge. This poses the key challenge for development in terms of technology transfer, adoption, assimilation, adaptation and management and the associated investment needs, including investment on the provision of public goods to overcome market failures in technology. UNIDO will seek to address this challenge by providing thematic and sectoral support services to strengthen the technological base of the industrial capacities of these countries. Special attention will be paid to promoting improved sector-specific technologies in the agro-industrial sector, since agriculture provides the mainstay of many developing countries, especially in LDCs, and agro-processing techniques provide the most fundamental means for enhancing productivity in these countries. The subsectors covered will include food processing, textiles, wood, leather and agro-machinery. Adoption of modern technologies will assist the developing countries, in particular LDCs, in diversifying their production structure in order to achieve sustainable economic development.

26. The challenge posed by the urban-industrial model of development can be transformed into an opportunity for sustainable development by integrating environment as a strategic element in the processes of production, new investment and technical change. Here technology and engineering can play a critical role in reducing the environmental impacts of production; and across a wide variety of industrial sectors newer, cleaner technologies are available as alternatives to older and dirtier technologies. These latest technologies and processes tend to be more efficient in the use of energy and materials and produce less pollution and waste. Therefore, within the overall framework of supporting technology transfer and management, UNIDO will give particular emphasis on the selection and promotion of environmentally sustainable modern and clean technologies. More generally, the Organization will continue to develop the technical cooperation services offered through its worldwide network of National Cleaner Production Centres (NCPCs) and National Cleaner Production Programmes (NCPPs).

27. An important aspect of technology upgrading for environmental sustainability relates to the application of energy efficiency measures and tools in industry. Energy is a key issue on the international development

agenda, with serious implications for productivity improvement, climate change and poverty alleviation. Accessibility to reliable and affordable energy is very unevenly distributed, both between countries and within countries. Many developing countries—in particular LDCs—and countries with economies in transition face the urgent need to provide reliable and affordable energy services.

28. However, the production/generation, distribution and use of energy are sources of global pollution and waste and substantially increase the atmospheric concentration of greenhouse gases. It is, therefore, necessary to increase energy efficiency to control greenhouse gas emission and protect the climate. In addition, by producing more output with the same energy input, energy efficiency promotes economic efficiency and productivity improvement as well as competitiveness of energy consumption enterprises. In the medium term, UNIDO's energy programme will, therefore, focus on the promotion of technologies, processes and tools that are efficient in terms of energy consumption and also on reducing emission of greenhouse gases from fossil fuels.

29. Information and communication technologies (ICTs) and biotechnology are among the three technological revolutions (the third being fuel-cell technology) currently under way, which are bound to have a powerful effect on economic development in the years to come. UNIDO will take a number of initiatives during 2004-2007 in these two fields. While in the case of ICTs these will relate to their application to industrial processes and decision support systems, in the field of biotechnology, UNIDO will direct its activities towards applications in the food processing and agro-industries, in particular in the areas relating to the regulation, access to proprietary technology and support to strategic research.

Trade facilitation and market access

30. Globalization and the associated liberalization of multilateral trade regimes hardly guarantee that much of the developing world will be able to benefit from the global markets and achieve rapid economic growth. Only a few developing countries have succeeded in penetrating such markets, while a disturbingly large number of others, especially LDCs, have not. The main bottlenecks have been the lack of the necessary productive and export capabilities and the in-built cumulative deficit in the capacity of the developing countries to conform to developed country market requirements. These requirements take the form of a myriad of technical conditions and barriers imposed through mandatory domestic regulations, quality, health, safety and environmental requirements and, to some extent, international standards.

31. Presently many developing countries lack the capacity to meet conformity requirements. The challenge faced by these countries is to reform and upgrade their standards-setting regime, establish efficient testing, certification and laboratory accreditation mechanisms to conform to the World Trade Organization (WTO) agreements on technical barriers to trade (TBTs) and sanitary and phyto-sanitary (SPS) measures, and to defend themselves in standards-setting bodies. In brief, they need technology diffusion and capacity-building for market access—the two key areas of comparative advantage of UNIDO that also underpin productivity growth, which constitutes the essence of its corporate strategy. Through targeted interventions UNIDO will assist the developing countries in capacity-building in the above-mentioned areas; and it will also seek to enhance the competitiveness of developing country enterprises through restructuring, upgrading, quality and productivity improvements and through links to global supply chain networks. This role has recently been highlighted in the memorandum of understanding signed by UNIDO and WTO in September 2003.

Private sector enterprise development

32. A vibrant private sector—with enterprises making investments, creating jobs and improving productivity—promotes growth and creates opportunities for poor people. In developing countries and transition economies it is the local firms—small and medium enterprises (SMEs)—which are responsible for most economic activity that has interface with productivity enhancement and poverty alleviation. This is particularly the case in the field of agriculture-based economies in Africa and LDCs, where most of the poor people are living and for which the development of agro-based SMEs would contribute to poverty alleviation, while at the same time enhancing productivity. UNIDO will continue to provide support for SME development through a series of technical assistance activities in this area of emphasis.

33. There are two distinct categories of small enterprises: modern small and medium enterprises and micro enterprises (cottage and household enterprises). Their problems are different, requiring a differentiated approach. For modern small enterprises the major problem is isolation—the fact that they are operating alone in a competitive environment. This is where “clustering” and “networking” can help and both types of groupings have competitive advantage. “Collective efficiency” gains can be realized through local external economies as well as joint action with other firms and industry associations. UNIDO has been promoting cluster development projects in Asia, Africa and Latin America over the past six years.

34. Modern SMEs in developing countries and transition economies can also benefit from being linked to the supply networks of large firms—national, regional and international. UNIDO’s programmes of promoting multi-sector partnerships (as in the automotive sector in India) and of subcontracting exchange are successful steps in this direction. Apart from providing marketing outlets, these programmes also promote technology upgrading and diffusion. UNIDO will continue these efforts, emphasizing the integration of modern SMEs into national, regional and global supply networks and value chains as conduits for market access and technological upgrading.

35. The problem of micro-enterprises is linked to the twin issues of globalization and poverty reduction. Although international development efforts are directed at bringing developing countries, particularly LDCs, into the mainstream of the globalizing world, it will take years, even decades, of sustained efforts to achieve that goal. In the meantime, there will be poor people in all these societies whose economic and social conditions should not be allowed to deteriorate. In this scenario, special measures to help micro-enterprises and small businesses assume importance. Poor people, especially women, typically engage in these activities, most of which are in the informal sector. They face a large number of barriers: limited access to technology and credit, lack of property rights, low skill levels, poor infrastructure and inappropriate policies and regulations. UNIDO’s support measures will address these problems and technical cooperation will cover areas such as transfer of simple technology and assistance in the establishment of low-cost manufacturing facilities using basic tools, training in skills improvement, microfinance and credit guarantee, and policy measures to tackle the problems of inappropriate regulations and lack of property rights. From a sectoral focus, agro-processing with simple technology can be an appropriate way to utilize local resources, including agricultural waste for the manufacture of low-cost products for low-income local markets. In respect of rural and remote areas, UNIDO will strive to provide support services for promoting access to electricity to the poor for productive use from energy derived from renewable resources like sun, wind, biomass, geothermal and hydropower.

Multilateral environmental agreements

36. The degradation of the national environment poses one of the greatest challenges to modern societies. Major problems include ozone depletion, global warming, water and air pollution, releases of POPs and land degradation including coastal erosion. The concern regarding these issues have brought the realization that if development (including industrial development) is to

be sustainable, the environment needs to be protected and environmental concerns must be systematically incorporated into the conventional paradigms of economic development.

37. The international community has responded to these challenges by entering into a number of multi-lateral environmental agreements in recent years. Since improvements in the environmental sustainability of industrial production processes are indispensable preconditions for the fulfilment of these agreements, UNIDO can make a major contribution towards their successful implementation. In doing so, UNIDO can help to meet several important Millennium Development Goals and also help to enhance the industrial productivity of its Member States in accordance with the core objective of its corporate strategy.

38. The services offered by UNIDO in support of the multilateral environmental agreements comprise the following:

- Elimination of ozone depleting substances (ODS) within the framework of the Montreal Protocol;
- Phase-out of POPs and persistent toxic substances (PTS) under the Stockholm Convention on Persistent Organic Pollutants and with the assistance of GEF;
- Management and sustainable use of integrated transboundary river basins, wetlands, coastal zones and large marine ecosystems under the auspices of GEF;
- Development of institutional capacities and methodologies for the Clean Development Mechanism (CDM) and joint implementation under the Kyoto Protocol.

III. OTHER CONSIDERATIONS

39. UNIDO will continue to use two principal vehicles to deliver its technical cooperation services: integrated programmes and country service frameworks, where a selection of services offered in several service modules is provided in a coherent and mutually reinforcing manner; and individual projects, comprising services offered in only one or two service modules.

Additionally, the Organization will also offer its services through the medium of its thematic initiatives, where there is a need to overcome particular industrial development challenges in a holistic manner. Several initiatives of this kind—covering the topics of market access facilitation, rural energy for productive use and post-crisis rehabilitation—have already been introduced. Others may be added as required. In all these cases, increased efforts will be made to enhance their impact and coverage. A detailed conference room paper on the implementation of UNIDO's integrated programmes and country service frameworks, updating the information presented to the twenty-seventh session of the Board, will be issued separately.

40. The resource requirements for the implementation of the first two years of the proposed MTP, 2004-2007, are detailed in the programme and budgets for 2004-2005, submitted to the nineteenth session of the Programme and Budget Committee in April 2003 and adopted for submission to the General Conference, with adjustments, by the twenty-seventh session of the Industrial Development Board, in August 2003 (IDB.27/Dec.6). The Organization will also undertake proactive funds mobilization activities in order to raise resources for its technical cooperation services.

41. The organizational arrangements at Headquarters have been streamlined with a view to enhancing UNIDO's capacity to deliver its services effectively. Measures are also being taken to delegate increased authority and responsibility to the field for implementation of UNIDO's technical cooperation activities. The financial and operational management of the Organization is being strengthened through the operation of the office of the Comptroller General, who has the responsibility for the functions of internal oversight, programme/project evaluation, programme policy monitoring, financial control, information and communication management. This arrangement is expected to ensure, in a coordinated manner, optimal use of the resources available to the Organization.

IV. ACTION REQUIRED OF THE CONFERENCE

42. The Conference may wish to consider the information provided in the present document and provide appropriate guidance.

Annex

DEVELOPING INDUSTRY: PRODUCTIVITY ENHANCEMENT FOR SOCIAL ADVANCE

UNIDO's Corporate Strategy

Introduction

1. In their search for enhanced relevance, effectiveness, efficiency and impact, the specialized agencies of the United Nations system, including UNIDO, have to come to terms with the fact that the field of economic development has been in turmoil.

2. This is partly due to the complexities arising from the ongoing process of globalization. In addition, there has been a wide range of unsettled issues, polarized opinions and nuances relating to the development agenda and the development experiences of developing countries and countries with economies in transition over the past fifty years. These are the reasons why not much can be taken for granted today in any discussion of the roles and corporate strategies of multilateral organizations, even where a clearly defined mandate exists.

3. In this document, therefore, an attempt has been made to review a number of relevant conceptual and practical issues of economic development in an evolutionary perspective. Against this backdrop, the paper seeks to define, in a focused manner, the strategy and approach that UNIDO should adopt to fulfil its mandate and mission.

4. This document is intended as a conceptual complement to the decisions taken by the governing bodies of UNIDO in recent years, including the Business Plan, the medium-term programme framework for 2002-2005, and in particular the *Strategic guidelines—Towards improved UNIDO programme delivery* adopted by the Industrial Development Board at its twenty-sixth session, held in November 2002. The purpose is to assist in the further focusing of UNIDO's specialized competences and services in fulfilment of its mandate of promoting industrial development and growth in developing countries and countries with transition economies.

5. This document is organized in four parts. The first part discusses the overall context for industrial development and the baseline scenario as specified by five key trends, namely productivity and income distribution, volatility, demography, the environment and trade. The second part discusses the evolution of development thinking since the 1940s, as well as the current development agenda and recent development experience, and then tries to outline the contours of a pragmatic development approach. It emphasizes the

critical role of productivity growth in bringing about sustainable economic progress. The third part brings the argument home and establishes the correspondence between the requirements of sustainable industrial development and poverty alleviation on the one hand, and the role of UNIDO as a provider of solutions on the other. In the process, an attempt has been made to sharpen or refine the Organization's corporate strategy based on the guiding principle of productivity enhancement and then to outline the services that the Organization could provide in accordance with its refined strategy. The final part offers concluding observations.

I. DEVELOPMENT EXPERIENCE IN PERSPECTIVE—DEVELOPING COUNTRIES IN WORLD INDUSTRY

A. Overview of structural developments

6. In contrast to the expectations generated by the conventional models of economic growth, only a few developing countries have been able to narrow down their economic distance from the advanced industrialized nations over the six decades following World War II. In addition, the growth experience of the developing countries has exhibited a tremendous variety, both geographically and temporally.

7. Real per capita income in the developing world grew at an average rate of 2.3 per cent per annum during the four decades between 1960 and 2000. This is a respectable growth rate. However, since the rich countries themselves grew at a rate of 2.7 per cent during this period, few developing countries managed to close the economic gap between them and the advanced nations. The countries of East and South East Asia, however, constitute the sole exception. Excluding China, this region experienced per capita gross domestic product (GDP) growth of 4.4 per cent over 1960-2000. Despite the Asian financial crisis of 1997-1998, countries such as the Republic of Korea, Malaysia and Thailand ended the twentieth century with productivity levels which were nearer to those enjoyed in the developed countries.

8. In other parts of the world, the pattern of economic performance has varied greatly across different time periods. China has shown a growth rate of 8 per cent per annum since the late 1970s. India has roughly doubled its growth rate—the annual real GDP

growth rate went up from 3.7 per cent in 1950-1980 to 6.2 per cent in 1990-2000, the corresponding annual real per capita GDP growth rates being 1.5 per cent and 4.4 per cent respectively. Latin America and sub-Saharan Africa both experienced robust economic growth prior to the late 1970s, and early 1980s—2.9 per cent and 2.3 per cent respectively—but they lost ground subsequently. Latin America's growth rate collapsed in the 1980s and has remained weak despite some recovery in the 1990s. Africa's economic decline, which began in the second half of the 1970s, continued throughout much of the 1990s, and has been aggravated by the incidence of HIV/AIDS and ethnic conflicts.

9. So far as industrial development is concerned, in 1960 the share of the developing countries in the world manufacturing value added (MVA) was 9 per cent (excluding China); by 1985 it had risen to 19.2 per cent, by 1998, to 21.7 per cent and by 2000 to 24 per cent (all these including China). However, the data show an increasing divergence of performance within the developing world. For example, during the period 1985-1998 the ratio of per capita MVA in the developing countries relative to that of the least developed countries (LDCs) moved from 5:1 to 9:1. From a regional perspective, the share of East Asia in MVA of the developing world increased during the same period from 43 to 53 per cent at the expense of the rest of the developing countries, except North Africa and the Middle East. In particular, the share of sub-Saharan Africa decreased from 3 per cent in 1985 to barely 1 per cent in 1998.

10. Export statistics convey a better picture in overall terms, although it is worse for LDCs. The value of per capita manufactured exports from the industrial countries declined from 22 times that of the developing countries in 1985 to 15 times in 1998. However, at the same time, the gap in per capita manufactured exports from the industrial countries vis-à-vis those from the LDCs widened from 192:1 to 212:1, and a similar trend is evident within the developing world itself, where the gap increased from 9:1 to 14:1. In fact, the share of sub-Saharan Africa in per capita manufactured exports dropped by half during the period. Similarly, the same acute regional imbalances within the developing world shown by MVA data are also visible with respect to export data: in 1998, East Asian per capita manufactured exports, excluding China, were 84 times those of sub-Saharan Africa, excluding South Africa, 37 times those of South Asia and three times those of Latin America and the Caribbean.

B. Key trends

11. There have also been a number of key trends affecting the prospects of the world economy, which have a significant impact on, and implications for, economic development in the developing countries. These are summarized below.

Productivity and income distribution

12. The global economy suffers from a severe handicap when it comes to reconciling efficiency with equity. Twenty-three of the 50 countries that in 1990 were at the bottom of the income per capita rankings registered a per capita income that was even lower in 1999. The other 27 countries of that group barely managed to offset population growth. At this rate, they could aspire to reach the current per capita income of Greece (currently one of the poorest of the 15 European Union countries) in around 80 years.

13. In addition, over the past 30 years, the LDCs, particularly those in Africa, have suffered a substantial fall not just in their share of world trade but also in their relative labour productivity, as measured by MVA per capita. Whereas the advanced industrial countries have continued their mutual convergence, the opposite is observed between them and the overwhelming majority of the developing countries.

Volatility

14. The quick succession of financial crises since the early 1990s, from that of Mexico to those of East Asia, Russian Federation, Brazil and the MERCOSUR countries, entailed a high degree of volatility, with sharp falls in real output every 20 months or so on average and with varying degrees of contagion. These swings with a modal length of two to four years entail irreparable loss of wealth and significant retreats in social progress in the affected countries.

15. Based on a sample of 31 developing countries, the International Monetary Fund (IMF) found that it typically took almost three years for output growth to return to previous trends after the outbreak of a financial crisis, and that the cumulative output loss averaged 12 per cent. In addition, these events have long-lasting repercussions on the domestic economy since they entail, in addition to declines in economic activity, a disruption in the flow of savings to their most productive uses and of the incentive system as a whole, as well as severe constraints in the conduct of domestic monetary and financial policy.

16. The international financial system lacks an early warning system to help prevent these kinds of occurrences, which weigh heavily on the economic and industrial performance of the developing countries.

Demography

17. The rich industrialized countries have been ageing whereas the developing countries are experiencing rapid increases in the relative number of children and youths. Without migration, the population of the rich countries would start declining and by 2050

it is estimated to be 126 millions less than what it is today (2003), with two older persons for every child. Meanwhile the labour supply in the developing countries will have grown by some 700 million by 2010 while their share of world youth will soon reach 90 per cent. There is just no alternative to job creation in the developing world. These demographic trends and the fight against poverty demand a proactive approach to support the development of micro-, small- and medium-sized enterprises, and of innovative entrepreneurs.

Environment

18. At the outset of the industrial revolution labour used to be relatively scarce and the stock of natural capital relatively abundant. After two centuries of dramatic rises in labour productivity, intensive use of natural resources at their extraction rather than replacement cost, and over-reliance on the ability of the natural environment to absorb the wastes generated by economic activity, natural capital has become relatively scarce, compared to labour availability.

19. Rich countries tend to see overexploitation of the ecosystem that ensures life on the planet (e.g. deforestation, soil erosion and climate change due to the exhaustion of the capacity of the natural system to recycle carbon dioxide) as a problem that needs to be addressed sooner rather than later. Over the last half century the world has lost a fourth of its topsoil and a third of its forest cover. Freshwater ecosystems are being lost at the rate of 6 per cent a year and marine ecosystems by 4 per cent a year.

20. Environmental degradation is as much a problem in the developing countries as it is in the industrialized nations. In fact, the problem may even be starker there, considering that poverty itself is a great environmental hazard. Industrialization, urbanization, rapid population growth and poverty along with de facto “grow now clean up later” environmental strategies in many developing countries are putting tremendous pressure on the physical environment, natural resources, forests and biodiversity, air and water quality and freshwater and marine ecosystems.

21. Increasingly, there is a realization, even in the developing countries, that the environment needs to be protected and environmental concerns must be systematically incorporated into the conventional paradigms of economic development, if development is to be sustainable. The issue of productivity of the society’s use of natural resources, that is, the rate of natural resource input per unit of output required by current technologies, also assumes importance. This involves full accounting for the value of ecosystem services, with a view to deciding on the economic rationale for substituting natural capital with man-made

capital or specific forms of natural capital for one another. Issues of natural resource productivity and valuation of natural assets are as important to the developing countries as they are to the advanced industrial nations if they are to have consistent productivity-led development policies over time. This creates important challenges for the development of clean technologies and improved environmental management systems, as also for innovation and technology diffusion.

Trade

22. The expectations raised by the Doha Round of trade negotiations have quickly receded owing to renewed protectionism and regulatory crises in the industrial countries, the fragility of the current recovery of the world economy and various other risk factors.

23. Sensitive issues remain pending, particularly those relating to agricultural protection, non-tariff restrictions to developing country exports of labour-intensive manufactures and intellectual property rights, among others.

24. The industrial countries have taken positive steps, such as the United States African Growth and Opportunity Act (AGOA) and the European Everything But Arms’ (EBA) initiative. But welcome as these measures are, their operation is subject to a number of question marks, not least relating to the ability of the LDCs to take advantage of them, for which they require a flexible supply response capacity which cannot be taken for granted at all. In fact, important inflows of capital and know-how, as well as the establishment of a basic technological and quality infrastructure, are some of the unavoidable pre-requisites for these countries to extract effective advantage from emerging trade opportunities.

II. The Development Agenda

A. Growth theories and the evolution of development thought

25. Thinking on industrial and economic development has gone through fundamental changes over the past few years. While growth theories, often based on simplifying assumptions and log-linear growth models, seem to provide simple explanations of the process of development, the actual development practices have been much more complex responding to the forces of a highly multi-faceted and dynamic process that involves shifting interactions between economic, social and cultural conditions, as well as policies and institutions over time.

26. In the first wave of theorizing about economic development from the 1940s, to the early 1960s, all

emphasis was placed on the accumulation of physical capital as the key to development (as reflected in the Harrod Domar, Lewis and two-gap models). The theories proposed by Robert Solow (1957) further helped to clarify the role of the accumulation of physical capital and emphasized the importance of (exogenously supplied) technological progress, as the ultimate driving force behind economic growth. The “new growth” theories developed by Paul Romer and others in the 1980s to 1990s, while supplementing Solow’s model noted that technological change is endogenous, and that education and ideas produce positive externalities and increasing returns. In the endogenous growth literature, knowledge is treated as a non-rival good and technological progress is seen to be determined by the accumulation of knowledge by forward-looking, profit-maximizing agents.

27. Development policy and practices, on the other hand, have followed their own path, influenced by theories, but also by the perceptions of the policy makers in the developing countries, international organizations and bilateral donors, policy economists, ideologies and even fads and fashions.

28. The models and hypotheses of the 1950s and 1960s had implications that emphasized saving and investment, and thus rapid accumulation of capital. Industrialization was emphasized as the key to development and to catching up to the high living standards of the industrial nations. The development of the manufacturing sector, it was felt, would provide access to modern technology, with its concomitant high productivity. The spillover effects would transform other sectors. Import-substitution industrialization (ISI) policies were often pursued as the most practical approach to promote economic development. It was also believed that a less developed country would not really benefit from free international trade and investment. It was further assumed that in the less developed economies there were pervasive market failures and government action was necessary to correct these market failures, and that therefore the state should function as the major agent of change.

29. In the 1960s the initial concentration on physical capital accumulation began to give way to the concept of investment in human capital and its implication for development. It was increasingly recognized that development depended on productive human agents, who, through their acquisition of know-how and increase in skills, could raise total factor productivity.

30. By the late 1960s and early 1970s, the consequences of the deficiencies in industrial strategies and planning as well as adverse effects of government intervention had become acute in many developing countries. Particular criticisms were levied against the neglect of agriculture, the inefficiencies of state-owned

enterprises, the adverse effects of import-substitution industrialization and balance of payments deficits. The effects of government failure were increasingly evident in the adverse consequences of price distortions—distortions that were prevalent not only in the product markets but also in wages, interest and exchange rates. The policy prescription now became to “get prices right” and also to “get all policies right”. Markets, prices and incentives became the central concern of policy making. It was recommended that policies should move from inward-looking strategies towards liberalization of the foreign trade regime and export promotion. Specifically, the new policy recommendations called for developing countries to adopt macroeconomic stabilization programmes; to privatize state-owned enterprises and promote the private sector; and to allow the market price system to work. The “Washington Consensus” attempted to summarize these policy stances as conducive to economic development.

31. The ideas derived from the Washington Consensus had considerable influence on the economic reforms of many countries from about the mid-1980s onwards, until the end of the twentieth century. However, the degree with which they were embraced varied from region to region, as did the manner in which these countries interpreted and chose to implement them. The region that made the most determined attempt to adopt and implement these policies was Latin America, where many emerging economies were engaged in accelerated structural changes, liberalization, deregulation and privatization. Eastern Europe (including the Russian Federation) and Africa also sought to improve the policy environment through the adoption of these ideas. The approach of some of the Asian countries including China, India and the Republic of Korea was, however, more cautious. Although they adopted a more market-oriented and private sector-friendly approach stressing the importance of sound macroeconomic conditions, many of the microeconomic policies adopted in these countries differed substantially from the postulates of the Washington Consensus.

32. By the turn of the century the popular support for the reform programme was declining in many parts of the world as it was felt that the Washington Consensus, with its overwhelming emphasis on macroeconomic orthodoxy, was not delivering its promise to facilitate sustainable and equitable growth. In Latin America the growth rate remained significantly below its pre-1980 level and there was a growing realization that the market-oriented reforms had paid little attention to the mechanisms of social insurance and safety nets. Economic decline persisted in many parts of Africa despite an overall “improvement” in the policy environment. There was a dismal failure of price reform and privatization in the Russian Federation in the absence of a supportive legal and regulatory mechanism. Finally, the Asian financial crisis exposed

the danger of allowing financial liberalization without adequate regulation.

33. The realization that the market-oriented policies might be inadequate without more serious institutional transformation led to the formulation of the so-called “second generation” reforms that emphasized “good governance”, reinvigoration of the state’s capability, and social policies including social safety nets and targeted poverty reduction. It was felt that stronger, more effective institutions were needed to complement the macroeconomic policy changes, and that liberalization and privatization would be counterproductive without strong regulatory institutions.

34. The emphasis on strong regulatory institutions—“get the institutions right”—corrected somewhat the bias of the original Washington Consensus favouring minimalist government. It is now realized that the governance structure requires sound institutions, laws and regulations for the proper functioning of the market economy, and that there is a synergy between state and market which needs to be supported to accelerate development. It is accepted that the private sector is best suited for direct production of consumer and producer goods or for inducing innovation and change. But the government still has extensive functions in dealing with new market failures (such as imperfect information and incomplete and imperfect markets), providing public goods, satisfying merit wants such as education and health, reducing poverty, providing physical and social infrastructure, and protecting the environment.

35. In recent years the development agenda has become broader and more complex. Thus the “comprehensive development framework” (1999) unveiled by the World Bank adopts a holistic approach (reminiscent of the ideas advanced in the 1940s and 1950s) to deal with the problems of underdevelopment. Similarly, the Millennium Development Goals (2000), which emerged out of the United Nations Millennium Summit of world leaders held in September 2000 set targets for combating poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women. Both, however, emphasize the two paramount goals of poverty alleviation and environmental sustainability, which have come to figure prominently in the current development agenda.

36. It is possible to draw some conclusions about development strategies from the experience of the past 50 years. Firstly, it is clear that growth strategies comprising economic policies and institutional arrangements show a great variety across countries and over time. The more successful ones tend to be context specific and are built around local capabilities, constraints and opportunities and are not unduly influenced by economic or development orthodoxy.

37. The development paradigm of the 1990s raised the hope that trade liberalization, macroeconomic stability and market-oriented policies combined with democratization would lead to the prosperity that had long eluded the developing countries. The decade ended with the sober realization that sound macroeconomics is not a goal but a precondition for growth. The latter realization however, was an important contribution of the Washington Consensus as it marked a departure from the development policies of the earlier decades which encouraged deficit financing and loose monetary policies leading to inflation, an adversarial posture towards foreign investment, barriers on imports and exports, industrialization based on high tariff and non-tariff protection, expansion of state-owned enterprises and the like.

38. Another important contribution of the development paradigm of the 1990s was the primacy it gave to the private sector in economic activities, particularly in production and distribution activities and in promoting innovation and change. This initially resulted in massive privatization programmes in many emerging economies. It also came to be accepted that the private sector, because of its innovativeness and speed of response to economic opportunities for improved productivity performance, has a key contribution to make in reducing the lead time required for translating different kinds of reforms to economy-wide productivity gains.

39. Although many of the postulates of the development strategies of the 1960s and 1970s—the so-called ISI approach—came to be modified through the economic reform programmes of the 1990s, and have rightly been abandoned in the current development agenda, there are some elements in that earlier strategy which are still relevant for some of the developing countries in specific contexts and circumstances. In fact, in spite of its somewhat unsavoury reputation, ISI worked well in a very broad range of countries until at least the mid-1970s as a strategy of development, intended to raise domestic investment, create production capability and enhance productivity. The Republic of Korea, which pursued an import substitution approach in the 1960s and switched to an outward orientation in the subsequent decade, continued an extensive set of industrial policies that took the form of direct credit, trade protection, export subsidization, and tax and other incentives. Both in China and India, although they transformed their attitudes towards markets and private enterprises from 1980 onwards, state intervention continued in various forms of support and protection for domestic capacity building. As has been mentioned earlier, it is these countries, which have shown worthwhile economic performance in recent years.

40. The lesson one can perhaps draw from this experience is that industrialization and capacity-

building of domestic enterprises should continue to be one of the key elements of the development strategy for a less developed country. This includes private sector development, the development of physical infrastructure for industry and policies to foster internationally competitive manufacturing and services sectors.

41. In this context, the state's complementary role with the market also assumes importance. In a low income environment, as in most LDCs, market imperfections inherent in the situation block investment and entrepreneurship in non-traditional activities. State intervention and proactive industrial policies have an important role in promoting ways to crowd in investment and entrepreneurship with some positive incentives.

B. Convergence and sources of growth: theoretical underpinnings and empirical evidence

42. This section discusses the issues of convergence and sources of growth, which have exercised the minds of development economists concerned with understanding the differential rates of growth between the industrialized and developing countries and also among the developing countries themselves. The conclusions arising out of this discussion are intended to assist in clarifying and refining UNIDO's corporate strategy.

43. While cross-country convergence in growth rates is accounted for by the conventional (neoclassical) theory in terms of capital accumulation, the endogenous growth theory emphasizes differences in technology across countries and over time. The neoclassical tradition incorporated the idea of declining marginal product of capital, so that sustained growth was possible only through exogenous technological change. If countries have access to the same technology, growth rates would be expected to converge across countries. However, the growth experiences of the developing countries have been diverse both in terms of growth rates and productivity. In fact, across large samples of countries, it does not appear that poor countries grow faster than, or are "converging" towards, the rich countries, or that they are "closing the gap" that exists in per capita incomes. On the contrary, an examination of the GDP per capita between LDCs on the one hand and the rest of the developing world and the advanced industrial countries on the other during the last three decades shows a clear pattern of divergence. The gap in income that separates the world's rich and poor nations is wide and glaring.

44. There can be many explanations for this situation. In practice, technological change in the developing countries has been uneven, with changing mixes of technology inflows and domestic technological efforts. Besides, even if all economies have access to the same technology, their growth rates and productivity can differ, if human capital and the incentives offered are

different. The "new" growth theories therefore note that technical change is endogenous and that education and knowledge produce positive externalities.

45. The importance of spreading knowledge, information skills, technology and technical change in promoting growth and productivity is further emphasized in the discussion relating to the "sources of growth" or "growth accounting". "Growth accounting" assumes that the total output of an economy is a function of its resource endowments (labour, physical capital, human capital) and the productivity with which these endowments are deployed to produce a flow of goods and services. Contributions of increased inputs to output growth are measured and any residual not explained by input increases is considered a measure of growth in the productivity of factor inputs. This residual, called growth in total factor productivity (TFP), is a measure of technological progress, upgrading of the quality of labour, and technical change defined very broadly to include, among others, improvements in techniques, economies of scale and management practices leading to real cost reductions.

46. Empirical evidence on the determinants of economic growth in the industrialized countries clearly establishes that the contribution of TFP to real income growth has been far more important than that of the factor inputs. The modern economic growth in these countries has been predominantly dependent on sustained improvements in technology rather than on capital accumulation.

47. Similar empirical studies on the growth experience of the developing countries are somewhat limited due to data constraints. However, over the past half a century, in most developing countries and especially in the initial stages of industrialization, a greater portion of increased output appears to be explained by increases in physical and human capital, with growth in productivity accounting for a relatively smaller portion of output growth. However, more recent research suggests a much greater role for productivity growth, by recognizing that in the countries with rapid capital accumulation the profitability of capital investment owes much to domestic learning and innovation. Also, it is quite clear that, while factor accumulation may be quite important in some specific contexts, productivity growth rather than factor accumulation accounts for most of the income and growth differences across nations.

48. This is illustrated by the spectacular growth experience of the newly industrializing economies (NIEs) of East Asia (including the Republic of Korea; Taiwan Province of China; Hong Kong SAR; and Singapore), which during the decades 1960-1990 have transformed themselves from technologically backward and poor to relatively modern and affluent economies.

49. The NIEs focused on productivity-enhancing instruments in particular. In fact, commentators have suggested that their success was the outcome of several interrelated features, including openness, the ability to learn from exporting and adopted foreign technologies and the existence of a skilled and competent work force. Learning, entrepreneurship and innovation, and a move towards international best practices were at the heart of their productive utilization of labour and investment.

50. In contrast, a comparison of relevant data analysed by UNIDO in respect of 32 LDCs and 22 industrial countries shows that there is a striking gap between both groups of countries in terms of the levels of technology and related practices. This is explained by the fact that the LDCs have experienced an overall decline in TFP during the relevant period, pointing to technological practices as a major reason. Indeed, such a decline is one expression of their increasing distance from the world technological frontier, which reveals their severe difficulties in accessing, assimilating and diffusing technology.

51. All these points conclusively establish the crucial role of productivity enhancement, driven by skills, knowledge enhancement and technological upgrading, in promoting faster growth.

52. The discussion so far has referred to the “proximate” determinants of growth, comprising factor accumulation and productivity change. There are also what some analysts describe as “deep” determinants, of which three appear most important, namely *geography, institutions and integration (globalization and trade)*.

53. First of all, *geography*. This does not concern just natural resource endowments, although they can have important direct and indirect influences on economic growth through their impact on institutions. Climate, for instance, has a heavy influence on the quality of land, crop yields and morbidity. Likewise, the distance and relative difficulty of access to the key international trade routes affects transport costs and can have a bearing on a country’s ability to become integrated into world markets, regardless of its economic potential and trade policies. Also, geographically or politically isolated countries do not benefit from technological diffusion.

54. The second fundamental or “deep” determinant is *institutions*, which includes the rule of law, property rights, the regulatory framework, appropriate economic and financial institutions, an independent judiciary, and bureaucratic capacity. The quality and effectiveness of the institutional structure cannot be taken for granted. Increasingly it is being realized that the existence and development of such institutions are essential preconditions and determinants of growth.

55. The third “deep” determinant is the degree of *integration* into the world economy. This assumes particular importance in the context of increased globalization, including increasing international trade in goods and services, greater international competition and increasing international flows of investment and technology.

56. It is the aspect of technology transfer and diffusion that is of particular importance because of its direct links with productivity enhancement. Two types of countries have been successful in absorbing technologies from abroad: countries with successful export-promotion policies and those that have been able to attract large flows of foreign direct investment (FDI).

57. Also, in a world where diffusion of technology and technological change is the key underlying factor accounting for productivity enhancement and where severe structural barriers sharply slow down the process, an international agency (like UNIDO) responsible for fostering the international diffusion of technical knowledge and enabling the developing countries to take advantage of it gains great potential relevance and importance.

58. Finally, all these determinants of growth have mutually reinforcing effects. At the same time it must be noted that, while theoretical models can help in understanding the underlying structure of the issues, they do not necessarily capture the complex process of economic development, and neither can they take full account of the diversity of the growth experience. An international organization like UNIDO must take due notice of this situation while formulating its corporate strategy and related activities and policy prescriptions.

C. Elements of a pragmatic development approach

59. On the basis of the discussions and conclusions described in the previous sections, it is possible to outline the contours of a pragmatic approach to development, which could guide the process of refining UNIDO’s corporate strategy.

60. Macroeconomic stability is an essential precondition for growth as is “good governance”. Macroeconomic stability requires fiscal discipline, and a prudent and coordinated mix of fiscal, monetary and exchange rate policies. The major elements of good governance are maintenance of law and order and the rule of law, low levels of violence and armed conflict, independence and transparency of the judiciary and enforcement of property rights. Another requirement is the quality of infrastructure, including power, water, telecommunications and transportation. All of these three elements are necessary to maintain a business climate for private sector investment, vibrant entrepreneurship, sustained productivity improvements and growth.

61. The private sector is the main engine of growth, as it is the major source of entrepreneurship and innovation. In a market-oriented economy it is the competitive private sector that is responsible for the production and distribution of goods and services, and for introducing technology, innovation and change. Therefore, promotion of the private sector is a key element of the development strategy.

62. For its proper functioning, however, the market economy relies on a wide range of non-market institutions that perform regulatory, stabilizing and legitimizing functions, with complementary roles being played by the private and public spheres of the economy that make the system sustainable.

63. Within this framework, growth can be realized through investment and gains in productivity. Business investment may be defined broadly to include all the activities that entrepreneurs undertake such as the creation and expansion of productive capacity, employing new technology and adapting and improving existing technologies, designing and producing new products, maintaining and improving quality, marketing these products and the like. The promotion of business investment for industrialization and simultaneously encouraging accumulation of knowledge, technology upgrading and technical change should be the central tenet of the development policy.

64. There are many facets to this approach. Firstly, appropriate microeconomic policies are needed to tackle both government and market failures inherent in low-income environments. These involve the removal of government-imposed barriers to entrepreneurship and interventions designed to provide inducements to promote modern, non-traditional activities in low-income economies dominated by the production of primary commodities. These include policies to foster export-processing zones, industrial parks or any form of pioneer industries. They also include policy interventions to improve information on new technologies or methods of adapting existing technologies and improve cost structures in the economy for the entrepreneurs. The articulation of microeconomic policies and interventions related to the supply of public goods occupies an important place in the policy agendas of developing countries, as indeed it does in the advanced industrial world. The crucial test for these policies is how far they are able to boost productivity growth, and thereby accelerate long-term economic growth.

65. For private sector-led productivity growth to occur, public policy interventions are required that finely mesh the incentives regime with the supply of public goods. Market incentives are critical to economic development and the incentive structure of a society is a function of its policy regime and institutional structure.

To ensure long-term, sustained growth it is essential that high-quality institutions be developed. It is the admixture of rules, norms and enforcement characteristics and the interaction that these produce among the economic agents, markets and institutions that ultimately determines economic performance. They constitute the primary determinants of the extent to which individuals are willing to make the long-term investment in capital, skills and technology that are associated with productivity growth and sustainable economic success.

66. As has been explained earlier, growth in productivity is primarily driven by technological progress, upgrading and diffusion. Benefits of technology upgrading and diffusion are mostly derived by those countries which have been able to attract substantial flows of FDI and/or have participated in large export efforts, thereby responding to competitive pressures from the export market. This necessitates policies to promote FDI and foster internationally competitive manufacturing and service sectors in the developing countries. The approach should be to combine the opportunities offered by the world markets to develop competitive industry that would motivate both domestic and foreign investors to invest in the economy. This would also be in conformity with the requirements of the multilateral trading system being developed since the conclusions of the Uruguay Round of trade negotiations in 1994.

67. Promotion of small- and medium-scale enterprises (SMEs) is key to fostering business activities. This is particularly the case of the agriculture-based economies in Africa and LDCs, where most of the poor are living, and for which the development of an SME agro-industrial sector would contribute to poverty alleviation—an important international development goal. Small enterprises constitute the seedbed for entrepreneurship which is crucial to the process of increasing productivity. SMEs support the building up of systemic productive capacities and contribute to the creation of resilient economic systems in which small and large firms are interlinked. Such linkages and resulting clusters of large and small enterprises are of increasing importance for the attraction of foreign investment. Small enterprises, as amply demonstrated in information and communication technologies, are also a significant source of innovation, often producing goods in niche markets in a highly flexible and customized manner. The experiences of East Asia, notably China, Japan and Taiwan Province of China, as well as the Bangalore region in India and the successful transition economies in Hungary and Poland, have shown the great importance of urban and rural small and medium enterprises in economic development. Small- and medium-scale enterprises account for the majority of firms and a large share of employment in most developing countries. It is in these enterprises, including

micro-enterprises, that most of the rural and urban poor work. Promotion of a dynamic small enterprise sector in both rural and urban areas would strengthen income-generating opportunities for poor people, while reducing their vulnerability to economic risks.

68. Finally, it has now become clear that there is no longer a trade-off between growth and measures for ensuring environmental sustainability. All developing countries now face problems of environmental degradation brought about by the urban-industrial model of growth. The concerns regarding ozone depletion, global warming and biodiversity have also brought about the realization that if development is to be sustainable, the environment needs to be protected and environmental concerns must be systematically incorporated into the conventional paradigms of economic development. This may be done by seeking to influence the behaviour of various economic actors through both market-based and command-and-control type measures as appropriate. In addition, there has to be a shift in the process of industrialization, from end-of-pipe pollution control to the use of new and advanced technologies, which are more efficient in the use of energy and materials and produce less pollution and waste. Finally, there is a need for the adoption of fundamental changes in both production design and technology represented by the “cradle-to-cradle” approach, and the reorganization of production and its redesigning upon biological principles in order to enhance resource productivity along the lines advocated by the concept of “natural capitalism”.

69. The next step is to examine how these elements of the pragmatic development approach influence the formulation of the corporate strategy and activities of UNIDO, an organization set up by the international community to assist the developing countries and the transition economies in their industrialization efforts.

III. STREAMLINING UNIDO’S CORPORATE STRATEGY AND ENHANCING THE EFFECTIVENESS OF ITS SUPPORT PROGRAMMES

A. Key strategy elements

70. A corporate strategy is the creation of a unique and valuable position for an organization, involving the definition of its priorities and a set of activities tailored to these priorities. The strategic positioning of any organization involves performing *different activities* from its competitors *or* performing similar activities in *different ways*. A fit among the activities is essential not only for competitive advantage, but also for the sustainability of that advantage. Sustainability comes from the activity system as a whole, not from its isolated parts, and is the key to operational effectiveness.

71. UNIDO’s mandate is to assist developing countries and countries with economies in transition in their industrialization efforts, to enable them to enhance their capacities for promoting sustainable industrial development for economic growth and poverty alleviation. Given the dynamics of the development process discussed earlier, UNIDO’s corporate strategy must focus on an increase in productivity growth, and the agency’s activities should be built around this central theme for achieving optimal effectiveness. Productivity enhancement would provide the needed strategic fit across all the activities and interventions.

72. As a specialized agency of the United Nations, UNIDO has a dual role. On the one hand, it provides technical cooperation services, which enhance skills, technology and related capacities. On the other, it also performs “global forum” functions by generating and disseminating knowledge about industrial development processes and associated issues, and initiating/ conducting debates and discussions on industrial development and related matters in order to influence the development agenda in this area. In both spheres of activities, UNIDO must focus on the key elements, which contribute to productivity enhancement in the development process, and eventually result in economic, social and environmental wealth.

73. In the context of a market-oriented, globalizing, international economic environment, the provision of global public goods provides justification and a rationale for the operations of multilateral organizations. In the case of UNIDO, these have to relate to the area of industrial development. More specifically, the creation, transformation and management of knowledge on industry can be considered a global public good, which is the legitimate concern of UNIDO. This would cover areas such as the transfer and upgrading of technology, learning, innovation, building of skills and capabilities, which have a direct bearing on productivity growth. The global forum function also involves benchmarking industrial performance and identifying international best practices for dissemination; organizing the exchange of sector-and-theme-specific information and views of experts and decision makers from different countries and regions; and disseminating knowledge on current and emerging trends, challenges and opportunities to inform policy-making. In doing so, UNIDO’s global forum activities draw upon in-house and collaborative research as well as the rich pool of experiences generated by its technical cooperation programmes.

74. The global forum function and the technical cooperation function thus reinforce each other. The results of the global forum function help UNIDO to improve the whole range of its services, while the experiences and insights gained from the technical cooperation activities are factored into the global forum function. Consequently, both kinds of activities support

each other in the quest for relevance, effectiveness and impact.

75. More specifically, the tasks to be undertaken for this purpose include:

- Identifying the range of UNIDO interventions that rely on well defined fields of specialization and are most appropriate to fulfil the Organization's mission;
- Maximizing the impact of UNIDO's operational activities by optimizing their synergies with global forum activities and enhancing specialized competencies;
- Furthering UNIDO's research agenda by enhancing in-house capacity and drawing on research cooperation and networking;
- Generating outputs of immediate utility for the international development community;
- Achieving an effective synthesis between the routine and innovative feature of UNIDO's programmes, while at the same time incorporating the state-of-the-art knowledge and improvements in the understanding of the development process.

76. With regard to the technical cooperation or operational functions, UNIDO must design practical and useful deliverables keeping in view the realities of the global economic environment as they impinge on the developing countries and transition economies in general and the LDCs in particular. The paramount consideration should always be to help enhance productivity growth so as to ensure long-term economic success. A few stylized facts emerging from the relevant and current trends and their respective implications for technical cooperation can be highlighted in this connection.

B. Stylized facts and UNIDO's response

Fact 1: Productivity enhancing business investment in plant and equipment technology and skills enables sustainable economic growth.

77. *General implications:* Developing countries, including LDCs, can achieve long-term economic growth only if business investments in equipment and infrastructure are characterized by increased productivity growth. The latter is a function of technological progress, learning, technological change and improvements in the quality of labour.

78. *Implications for UNIDO's technical cooperation:* Developing countries need to create a business climate conducive to promoting both domestic and foreign

investment. Investment in equipment and infrastructure involving the creation and expansion of productive capacity should be combined with the adoption and improvement of modern technologies, improvement in skills, adherence to the established quality standards and participation in the domestic and world markets in harmony with the established trading rules in order to develop competitive industry. In other words, in the process of industrial capacity creation, capital accumulation and technological change should be closely intertwined. That will ensure productivity enhancement and long-term economic growth. UNIDO, in these circumstances, should assist the developing countries and the transition economies:

- To develop a positive investment climate by advising them on international best practices and experiences in industrial development, investment promotion and effective industrial policies and strategies;
- To create and develop capacities for identifying technology gaps and for the acquisition, adaptation and improvement of technologies by providing information on successful experiences and worldwide best practices in the area;
- To develop national quality and standards systems in support of industrial competitiveness, market access and the protection of consumer health, safety and environment.

Fact 2: There are widening productivity differentials between and within countries.

79. *General implications:* The quest for development and the fight against poverty will not succeed unless inter- (and intra-) country productivity differentials are narrowed through the mobilization of skills, knowledge, technology and information in the developing countries, resulting in equitable and sustainable development.

80. *Implications for UNIDO's technical cooperation:* The developing countries need to build the capacity to implement effective interventions to foster productivity growth and to monitor it at different levels of aggregation. UNIDO should assist these countries:

- To develop national monitoring systems for industrial productivity at different levels of aggregation (firm, sectoral, regional and national) at the country level, in order to measure, monitor and set targets for short-term and long-term trends in productivity;
- To create capacities for implementing policies and programmes geared to the absorption, adaptation and diffusion of quality and productivity-enhancing technologies that are also environmentally sound.

Fact 3: Increasing marginalization of LDCs is a consequence of their inability to master technologies and take advantage of market-opening measures in the advanced industrial countries.

81. *General implications:* (a) The increasing relative concentration of poverty in the developing countries in general, and the LDCs in particular, is associated with their inability to narrow productivity differentials with the more advanced economies and thus to generate sustained and equitable development; (b) Marginalization from world trade and investment flows stems from the LDCs' inability to meet the minimum conditions for having conducive incentive systems and an appropriate supply of tradable goods. This problem is aggravated further by lingering iniquities in the world trade regime, which are being addressed only slowly.

82. *Implications for UNIDO's technical cooperation:* Developing countries, particularly LDCs, need to foster domestic entrepreneurship in order to increase their trade-related supply response capacity. UNIDO can support these countries in this area through:

- Assistance in the establishment and strengthening of quality and standard setting institutions;
- Advice on best practices relating to improvement in quality, both in terms of processes and products;
- Assistance in investment and technology promotion aimed at speeding up the transfer of quality and productivity enhancing technologies, which are also environmentally sound;
- Advice for accessing external markets and on various export-promotion measures.

Fact 4: The small and medium enterprise sector in developing countries is often seen as a means of generating low-skilled jobs and fighting poverty. This implies a neglect of the SME sector's important contribution to fostering growth, specialization, technological innovation and exports.

83. *General implications:* Important opportunities for dynamic industrial growth are foregone when the potential contribution of SMEs to innovation and exports is not recognized and promoted.

84. *Implications for UNIDO's technical cooperation:* The SMEs cannot be treated like a homogenous sector. Support programmes must be targeted towards different types of enterprises (medium, small and micro) and respond to their varying needs and capacities. Policy and institutional support actions need to be designed with specific objectives in mind. These can range from

directly poverty-reducing programmes to support programmes geared towards technological catching up and enhanced internationalization. UNIDO's technical cooperation in this area thus consists of:

- Supporting the integration of more advanced small to medium enterprises into global value chains and procurement networks;
- Promoting horizontal, vertical and regional SME networks and improving the collective efficiency of existing SME clusters;
- Strengthening of specialized public and private service providers seeking to address market failures working against SMEs (in areas such as business information, technology management and access to finance);
- Enhancing the entrepreneurial and managerial skills of micro-enterprises, with emphasis on disadvantaged rural areas, and on harnessing the potential of women entrepreneurs, with a view to reducing regional development disparities.

Fact 5: Weak cooperation links between economic agents, markets and institutions in developing countries prevent them from drawing effectively on international trade and investment flows.

85. *General implications:* Segmented domestic products, skill and technology markets, dysfunctional institutions, and the lack of the necessary infrastructure and incentives that domestic firms need to compete, learn and innovate, prevent developing countries from participating meaningfully in world trade and investment flows.

86. *Implications for UNIDO's technical cooperation:* The establishment of market incentives for the rapid diffusion of knowledge, information, skills and technology across economic agents and institutions is key to the development of private sector-led, productivity-driven, industrial development. Through its support to the design and implementation of effective industrial policies, strategies and other upstream cooperation activities, UNIDO complements its technical cooperation programmes with a view to fostering technology diffusion and competitive upgrading for equitable and sustainable industrial development.

Fact 6: Agro-based industries have a predominant role in the development prospects of developing countries, especially LDCs.

87. *General implications:* The overwhelming majority of developing countries and almost all LDCs are

endowed with considerable agricultural resources, a significant (potential) labour force and/or at least some indigenous (natural/mineral) resources offering a viable basis for establishing or strengthening agro-based industries, providing employment for the local population and generating value-added for the local community, in particular in rural areas which are facing pervasive problems of food insecurity, poverty, malnutrition and limited competitiveness.

88. *Implications for UNIDO's technical cooperation:* Production of commodities based on agricultural outputs and local (natural) resources are in permanent demand throughout all world markets—especially if they imply a natural origin. Agro-based industries convert agricultural products into much needed consumer goods such as foodstuff, textile apparel, leather products, wooden articles and composite materials—in fact into commodities of prime needs (food, clothing, shelter and tools), as well as other articles such as beverages, canned and frozen food, fashion-oriented garments and leather goods, furniture etc. At the same time, international/global competitiveness admits only safe, certified, reliable products with consistent supply, which assumes well organized, knowledge-based, environmentally sound product development, production/process technology and quality assurance systems, whereas most of these industrial sectors are fairly labour-intensive. Based on their intrinsic natural resources, developing countries, especially LDCs, have all the material and environmental conditions to participate in the global value chain, but they lack appropriate knowledge, skills, machinery and contacts due to missing investments, market intelligence, production skills and research and development institutions.

89. UNIDO offers highly focused, specific and fine-tuned technical assistance services in all these areas of industrial activities and functions, possesses a wide international network and accumulated (institutional) experience enabling it to disseminate best manufacturing practices, to transfer the best fitting (most appropriate, yet productive) technology—both hardware and software—to establish and/or strengthen support (training, development, testing, service) institutions, to set benchmarking criteria and to implement related systems. Development programmes for strengthening productive capacities, in particular through skills enhancement and technology-based interventions are targeting small and medium enterprises and specific agro-based sectors (in particular agro-machinery, food processing, leather and leather products, textiles and wood) with a view to enhancing the competitiveness of their products in domestic, regional and world markets.

Fact 7: Industry makes suboptimal use of natural resources and can be a significant source of pollution and waste.

90. *General implications:* The costs of unsustainable exploitation of natural resources on the one hand, and of excessive pressure on the absorptive capacity of the natural environment on the other, are passed on to future generations without taking recourse to preventive and remedial steps, and thereby curtailing future industrial development. The typical urban-industrial model of development imposes heavy environmental and economic costs and needs to be transformed into an opportunity for sustainable development by integrating the environment as a strategic element in the processes of production, new investment and technical change.

91. *Implications for UNIDO's technical cooperation:* Through its activities in the areas of environmentally sound technology and clean energy, UNIDO speeds up the international and domestic diffusion of environmentally sound technologies that are quality and productivity enhancing, with particular attention to specific industrial sectors and the needs of the poor. Specifically, UNIDO's activities in this field include:

- Technical assistance to increase national capacities in environmental planning and policy formulation through a strengthening of the appropriate infrastructure and human resources;
- Provision of information and demonstration facilities on the use of clean production and processing technologies and environmental management techniques through an international network of National Cleaner Production Centres;
- Support with the transfer of environmentally friendly production and processing technologies and the application of pollution control and waste-management systems;
- Assistance to enable developing countries and transition economies to meet their commitments under international environmental protocols and conventions.

Fact 8: There is considerable scope to improve the efficiency with which industry uses energy.

92. *General implications:* Improving energy efficiency is broadly consistent with the major objectives of most national energy policies and with the intergovernmental climate negotiation process. The Climate Convention and Kyoto Protocol together create both challenges and opportunities for energy efficiency

measures and technologies. On the one hand, an increase in the pace of energy efficiency improvement is needed to control greenhouse gas emissions and protect the climate. On the other hand, the Kyoto Protocol, through the Clean Development Mechanism (CDM) and Joint Implementation (JI) will establish new markets for energy efficient technologies and services in developing and transition economy countries.

93. *Implications for UNIDO's technical cooperation:* The new priority for UNIDO's protocol-related global forum and technical assistance activities will be to facilitate the involvement of business and industry in CDM and JI. Interventions will initially focus on controlling greenhouse gas emissions through industrial energy efficiency. This is considered to be an essential component of emissions mitigation. It is one of UNIDO's core activities, central to the Organization's mandate and an issue on which UNIDO can play a lead role in defining the development agenda. Measures to improve industrial energy efficiency also yield improvements in productivity and reliability.

C. Implications for UNIDO activities

94. From the above, the following overriding implications for UNIDO can be derived:

- UNIDO needs to devise and implement specific interventions through its technical cooperation activities aimed at speeding up the transfer and mastery of technical knowledge and facilitating market access and development by fostering the building of capacities required to that effect. Productivity gains, in their various manifestations, are the ultimate gauge of the impact of these interventions;
- The transfer of technical knowledge is key to UNIDO's mandate. But so is making sure that such knowledge is effectively put to productive use. For this reason, institutional capability building, skill formation and entrepreneurship development are also key to the success and impact of UNIDO's technical cooperation programmes;
- From this perspective, a new approach to UNIDO's technical cooperation activities is hereby proposed, which should result in a sharper focus and enhanced effectiveness in the deployment of the experience and expertise of the professionals assigned throughout UNIDO's eight service modules. This approach, which has been validated in the Venice I and II global forum exercises, seeks to facilitate a better conceptual and operational design of the Organization's activities, as well as enhanced impact.

95. UNIDO interventions can analytically be clustered around two key areas of comparative advantage:

- (i) Technology diffusion;
- (ii) Capacity-building for market access and development.

96. The area of *technology diffusion* comprises all the activities that deal with technological learning, absorption and mastery as the key outcome sought. This includes, above all, programmes relating to technology and investment promotion, technology foresight, technology management, biotechnology, entrepreneurship development, upgrading and rehabilitation of manufacturing and technical services, South-South cooperation, and the transfer, absorption and mastery of environmentally sound technologies. The last element includes the programmes relating to the implementation of the various environmentally related international protocols and the cleaner production centres and energy programmes.

97. The area of *capacity-building for market access and development* comprises all activities aimed at promoting the readiness of SMEs to face external competition, both internationally and domestically, including those performed in the areas of quality, standards and metrology, sanitary and phytosanitary measures, labelling, value chain integration as well as all those others that bear directly on Member States' export performance, such as small business export consortia and export-oriented clusters and networking and support to enable SMEs to respond to changing market conditions in increasingly opened economies. Clearly, there are important synergies to be reaped between the activities and respective outcomes in this area and those of the area of technology diffusion.

98. In the two areas, focus on the LDCs and the poor will continue to be stressed and sharpened, seeking tangible contributions to the fight for poverty reduction and for social progress, including emphasis in the fields of rural energy, women entrepreneurship and micro-enterprises. Environmental sustainability of industrial development will also be an essential ingredient through the emphasis on clean technologies and cleaner production practices.

99. Thus, in reinforcing the multiple links between entrepreneurship, technology, productivity enhancement and growth through sustainable industrial development, UNIDO would be effectively responding to the challenges of reducing extreme poverty and ensuring environmental sustainability envisaged in the Millennium Development Goals.

IV. CONCLUSIONS

100. The development experience of the past 50 years has helped us in identifying the contours of a pragmatic approach to development. This approach transcends economic or political orthodoxy.

101. In the past we witnessed a sharp confrontation between the ideals of the planned economy and those of the market economy. This time the dilemma is quite different. The challenge now lies not in the search for a completely new set of *alternative* policies, but in ensuring that current broad policy prescriptions effectively address the key development bottlenecks and thus actually deliver what is expected from them, that is, a narrowing of international and national disparities in economic and social development.

102. Let us illustrate the above with a reference to the policy implications of free trade. Recent experience offers no examples of dynamic, long-term growth in closed economies. But many of those countries that did open their economies also failed to attain such dynamic, long-term growth. It would certainly make no sense to advise these countries to return to the closed economies of the past. But it is quite clear that telling them just to open up their economies is not nearly enough. This

approach needs to be considerably enriched with a more detailed treatment of what it entails to open an economy in a world driven by innovation and technical change. For instance, it calls for paying due attention to the micro-fundamentals of competitive development, the supply of public goods, the incentive system and institutional development.

103. This raises important policy challenges, such as those relating to the development of the domestic scientific and technological skills and capabilities needed to meet the increasingly stringent conformity requirements of advanced country markets or to the ever higher quality and technology standards that need to be met in order to become a viable manufacturing exporter, all within a context of ensuring equitable wealth distribution and protection of social and natural assets. Neglecting these and related policy issues normally leads to dead ends in the search for integrating developing countries into world trade and investment flows.

104. It is key for an agency like UNIDO to attain an effective integration between the conceptualization of the current policy challenges facing the developing countries and its approaches to technical cooperation delivery on the ground.