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**Eradication of poverty and other development issues:
industrial development cooperation**

Industrial development cooperation

Note by the Secretary-General

The Secretary-General hereby transmits the report of the Director-General of the United Nations Industrial Development Organization (UNIDO) on industrial development cooperation in accordance with General Assembly resolution 57/243 of 20 December 2002, to which is annexed an information note on the Global Biotechnology Forum as mandated in Assembly resolution 57/237 of 20 December 2002, and Assembly decision 58/545 of 23 December 2003.

* A/59/50 and Corr.1.

Industrial development cooperation

Report of the Director-General of the United Nations Industrial Development Organization (UNIDO)

Executive summary

In accordance with General Assembly resolution 57/243 of 20 December 2002, the Secretariat hereby submits the report of the Director-General of the United Nations Industrial Development Organization (UNIDO) on industrial development cooperation for the consideration of the Assembly at its fifty-ninth session. The report contains information on the outcomes of the Global Biotechnology Forum, held in Concepción, Chile, from 2 to 5 March 2004, as stipulated in Assembly resolution 57/237 of 20 December 2002 and Assembly decision 58/545 of 23 December 2003 (see annex).

The present report focuses on the critical role of productivity factors and industrial development for the achievement of the Millennium Development Goals; and underlines the fact that productivity enhancement is a main factor in promoting sustained growth which is essential for poverty alleviation. Industrial development as the main source of the economic growth makes an important contribution to the achievement of the Millennium Development Goals by promoting skills, knowledge and technology.

In exercising its mandate to promote sustainable industrial development in developing countries and economies in transition, UNIDO has made a comprehensive review of its services to ensure their alignment with the requirements of the Millennium Development Goals. The UNIDO corporate strategy, "Productivity enhancement for social advance", was developed to better focus UNIDO activities and interventions on productivity growth.

The report provides an overview of UNIDO services and other activities undertaken over the past two years in the context of the Millennium Development Goals, reflecting strategic changes that resulted in better programme delivery and increased efficiency of UNIDO activities. The main modalities through which UNIDO services are delivered are integrated programmes and country service frameworks based on the service modules complemented by thematic initiatives/programmes as well as stand-alone projects. Addressing the problems of industrial development through integrated programmes significantly enhances the impact of the UNIDO operational activities and their contribution to the Millennium Development Goals.

To give due emphasis to UNIDO activities in least developed countries, the report makes special reference to the *Industrial Development Report, 2004* entitled *Industrialization, Environment and the Millennium Development Goals in Sub-Saharan Africa: The New Frontier in the Fight Against Poverty*, which addresses the dynamic processes of productivity growth, wealth creation and social advance in sub-Saharan Africa in the context of the Millennium Development Goals.

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I. Millennium Development Goals and sustainable industrial development

1. The Millennium Development Goals are more than targets set by the international community for minimum levels of human and social well-being in poor countries. They are also basic *preconditions* for sustained economic development. Social and economic development must proceed hand in hand and complement each other in vital ways. The improvements that Millennium Development Goals envisage in health, education, gender, environment and infrastructure are essential if productive sectors are to grow and generate wealth-creating employment. Only such improvements can provide the high-quality inputs needed for the productivity increase that sustained growth requires, and only the greater equity and opportunities implied in the Millennium Development Goals can provide the social stability without which growth cannot succeed.

2. The achievement of Millennium Development Goals, particularly the halving of income poverty, also requires faster economic growth especially in those countries where poverty is already the worst and where the recent economic performance has been the weakest. The poorest countries, especially in sub-Saharan Africa, are, on average, also those that pose greatest challenges in terms of growth rates needed to achieve the Millennium Development Goals. While this may seem an insurmountable task, it is possible to start from a low base and grow rapidly, as the experience of some high-performing developing economies shows, provided that these countries can overcome the underlying structural problems.

3. Productive development has a critical role to play in helping to raise growth rates. It is the motive force for applying new technologies to production and the most important source and diffuser of technological innovation. It creates new skills and work attitudes, catalyses institutional change and breeds modern entrepreneurship. It is the best way of modernizing the export structure and creating the base for sustained export increase along with higher wages. Successful industrialization helps create the employment that poor economies need as they release labour from agriculture, both directly and by stimulating the development of modern services.

4. A number of external and domestic policy interventions are needed to reinforce the relationship among Millennium Development Goals, poverty reduction and sustained growth. These interventions primarily work by unleashing the growth potential and thus establishing the necessary framework for productive sector development. Productive capacity-building and, particularly, private sector development strategies play an important role by promoting economic diversification and structural change. One such growth pole is the accelerated market liberalization in advanced countries directed towards developing-country products which, when complemented with trade capacity-building in developing countries, should result in accelerated growth in exports. In addition to these interventions, institutions for the facilitation of domestic technology diffusion and the provision of the public goods associated with them, play a key role in upgrading the capabilities required for industrial development. Taken altogether, these foster the demographic, productivity and technology transitions that then enhance economy-wide productivity, reducing the gap between actual and potential economic growth. In this context, the achievement of Millennium Development Goals and the formulation of national poverty reduction strategies in tune with the productive

capacity-building needs of the economy are the critical policy shocks needed by the least developed countries to break out of the pervasive poverty trap haunting them and unleash their growth potential.

5. Functional policies for industrial development pay higher dividends when they are implemented resting on the basics of good governance, macroeconomic stability and sound institutions. At their current stage of development, most least developed countries have much to gain from across-the-board measures to improve framework conditions. Such reforms can be expected to provide the critical mass necessary to attract investment without which few countries can hope to meet their Millennium Development Goals.

6. However, comprehensive development strategies need to go further than this, by incorporating functional private sector promotion policies to enhance productive capacity and productivity performance. Here, the institutions of the technological infrastructure and related extension services for the sector of small and medium-sized enterprises (SMEs) play a vital role, as does the implementation of forward-looking industrial development policies that are conducive to the diffusion of environmentally sound and emerging technologies.

7. Technological infrastructure to support the development of productive capacity, such as those relating to the quality system (including capacity in the areas of metrology, testing, standardization, and quality management), is becoming indispensable even in countries at a very early stage of manufacturing development, simply because of the stringent health, safety, environmental and other technical regulations and conformity requirements imposed by advanced industrialized countries. In addition, technical education and privately run or mixed apprentice systems are needed to complement on-the-job-training so as to support the development of skills required to promote learning processes in industry.

8. SMEs are frequently handicapped the world over in terms of size, resources and skills needed to undertake various kinds of technological and training activities, enhance productivity and compete in markets that work based on stringent supply, standards and delivery requirements. As SMEs are often the main source of income, employment and consumable goods for most poor people, constraints on their productivity and growth are also impediments to poverty reduction. In particular, in the predominantly agriculture-based economies of Africa and least developed countries, where more than 70 per cent of the poor live in rural areas, diversification towards non-farm activities, for example, through promotion of agro-processing SMEs, needs to be a major component of the development and poverty reduction strategy.

9. Effective and cost-efficient provision of extension and productivity services for SMEs encompasses the basic public goods required to spur development. These services can take many forms, from technical and management advice to financial assistance. Financial support can take the form of loans with subsidized interest rates, credit and insurance guarantees or grants aimed at stimulating particular activities, such as exports, technological learning, innovation and investment, and can be designed to make up for the regional or sector-specific disadvantages of SMEs. SMEs can also be supported through "soft aid" such as consulting services, information and training and assistance aimed at facilitating the establishment of export consortia and local clusters. A further form of assistance is that aimed at developing suppliers' and subcontracting networks with large enterprises, including

SMEs. The most effective extension services provide a combination of such inputs, and are proactive in reaching out to enterprises that lack the time and information required to approach them. Productivity Centres are a special form of extension, geared to analysing and addressing productivity gaps, in particular in technologically advanced activities.

10. The pace of economic growth required by the income poverty reduction target and the environmental goals envisioned in Millennium Development Goal 7 are often seen to be at odds with one another in the developing world, owing to a widespread misconception that environmental degradation is a price to be paid for industrial development. While achieving the income poverty reduction Millennium Development Goal target implies a pattern of structural change consistent with high levels of economic growth, there can be policy interventions formulated to address the problems of environmental degradation associated with rapid increases in industrial activity. To undertake an environmentally sound industrial development strategy, countries need to make progress especially in two areas: better integration of, and cohesion between, industrial and environmental policies, and the diffusion of environmentally sustainable technologies with the help of international assistance.

11. If, among others, these ingredients which are required to embark upon a path of diversification, structural change and productivity growth in an environmentally sustainable manner are ignored, the Millennium Development Goals may fail to start off sustained development processes even if they largely succeed in reaching the targets encapsulated by the indicators of progress.

II. Response of the United Nations Industrial Development Organization (UNIDO)

12. The United Nations Industrial Development Organization (UNIDO) has responded to the challenges posed by the Millennium Development Goals with a comprehensive review of its services to ensure their alignment with the requirements of the Millennium Development Goals. Where appropriate, the Organization has revised its programmatic interventions, administrative procedures and organizational structure to enable it to meet these requirements effectively.

13. The specific responses of UNIDO to the Millennium Development Goals and related developmental objectives set by the international community have comprised:

- The formulation of a new corporate strategy.
- The refinement of the developmental services offered by UNIDO within the framework of its eight service modules.

14. The UNIDO corporate strategy, entitled “Productivity enhancement for social advance”, rests on the premise, derived from empirical research and experience, that productivity enhancement plays a crucial role in promoting sustained growth which is essential for poverty alleviation, and the conviction that industry as the main source of this growth can make an important contribution to the achievement of the Millennium Development Goals by promoting skills, knowledge and technology. The corporate strategy proposes a new approach for UNIDO activities and interventions with a better focus on productivity growth. This new approach is

aimed at promoting sustainable industrial development by reinforcing the multiple links among entrepreneurship, technology, productivity enhancement and growth, and at facilitating a better conceptual and operational design of the Organization's support services.

15. The UNIDO corporate strategy calls for an effective integration by UNIDO of the conceptualization of the current policy challenges facing developing countries and transition economies, and its approach to technical cooperation on the ground. It consequently requires an increased synergy between the Organization's global forum and technical cooperation activities to ensure that they reinforce each other in the quest for relevance, effectiveness and impact. The global forum function should thus serve to identify topical areas of need for the Organization's technical cooperation in developing countries and countries with economies in transition, while the technical cooperation function should help to provide inputs for the global forum function and to identify gaps in the global forum activities of UNIDO.

16. In line with the corporate strategy, the UNIDO technical cooperation activities based on the service modules have been readjusted to meet the evolving needs of developing countries and countries with economies in transition. In making this adjustment, particular emphasis was placed on ensuring that these modules support the achievement of the Millennium Development Goals within the framework of the UNIDO mandate. In this connection, Goals 1 (Eradicate extreme poverty and hunger), 3 (Promote gender equality and empower women), 7 (Ensure environmental sustainability) and 8 (Develop a global partnership for development) have been seen as being especially relevant for the work of UNIDO, although the Organization's services also contribute to the achievement of the other health- and education-based goals by supporting the development of the critical industrial capacities and infrastructure required for their achievement.

17. The programmatic review resulted in the selection of the following eight service modules:

1. Industrial Governance and Statistics
2. Investment and Technology Promotion
3. Industrial Competitiveness and Trade
4. Private Sector Development
5. Agro-industries
6. Sustainable Energy and Climate Change
7. Montreal Protocol
8. Environmental Management.

18. The main modalities through which UNIDO services are delivered are integrated programmes and country service frameworks based on the service modules complemented by thematic initiatives/programmes as well as stand-alone projects. Addressing the problems of industrial development in an integrated and coherent way, the integrated programmes significantly enhance the impact of the UNIDO operational activities and their contribution to the Millennium Development Goals. In 2003, integrated programmes and service country frameworks covered 51 countries. UNIDO technical cooperation delivery steadily increases and reached its

highest level in 2003, amounting to \$94.6 million. This represented an increase of 16 per cent over the corresponding figure for the previous year.

III. UNIDO at work

19. The services offered by UNIDO within the framework of eight service modules cover a wide range of activities related to Millennium Development Goals 1, 3, 7 and 8 as noted above.

20. **Service module 1** assists beneficiary countries in monitoring, benchmarking and analysing their industrial performance and capabilities and, on that basis, in formulating, implementing and monitoring strategies, policies and programmes to improve the contribution of industry to productivity growth and the achievement of the Millennium Development Goals. Specifically, the UNIDO services under this module have technical cooperation as well as global forum and research dimensions and comprise: building capabilities in industrial statistics, preparation of national and regional strategic industrial diagnoses, capacity-building for industrial policies and strategies, statistics, industrial development indicators and scoreboard, economic research, Industrial Development Reports, and sectoral and policy studies.

21. The 2003 edition of the UNIDO industrial statistics databases (INDSTAT) on industry was disseminated worldwide through several media, including CD-ROM, hard-copy publication and the Internet. UNIDO also redesigned this Internet-based dissemination product by incorporating a new interface. The international statistical community largely benefited from this new approach, as it promoted good practices in statistics and significantly improved data quality.

22. UNIDO *Industrial Development Report, 2002-2003*¹ with its main theme, “Competing through innovation and learning”, has been followed by *Industrial Development Report, 2004*² (2003-2004) which focuses on the role of industrialization in the achievement of the Millennium Development Goals in Sub-Saharan Africa. The report provides practical recommendations on the ways to meet Millennium Development Goals in the region.

23. **Service module 2** is aimed at overcoming the variety of policy and market failures that constrain domestic and foreign investment activity and the ability to engage in effective technology development and management. UNIDO supports national efforts in the fields of investment and technology promotion. Recent investment promotion activities encompass three main areas: formulation and promotion of investment projects in biotechnology (Cuba), the automotive industry (Colombia) and agro-industry and pharmaceuticals (Ghana, Nigeria and the United Republic of Tanzania); training of national staff and formation of local networks for enterprise and project profiling and appraisal for countries including Ecuador, Ghana, Malawi and Nigeria; and survey of foreign investors in 10 sub-Saharan countries to assess their motivations, performance, perceptions and future plans as an input to capacity-building and strategy design for national institutions servicing foreign investors, supplemented by a competitiveness benchmarking exercise launched first for Kenya and Nigeria in the pharmaceutical and agro-processing sectors.

24. UNIDO technology promotion activities concentrate on upstream intervention at government level in devising appropriate policies, strategies and operational

action plans to address the technological divide. Technology foresight awareness and capacity-building activities were implemented at the regional level in Eastern Europe and in Latin America, focusing on national core competencies and local sectoral benefits enabling adoption of, and upgrading to, new and more innovative technologies. Special attention was given to technology road-mapping addressing technology strategies in specific industrial sectors in South-East Asia.

25. **Service module 3** is designed to take full advantage of the liberalization of international markets resulting from the process of globalization, in particular by strengthening local capacities to meet the wide variety of technical standards and conformity requirements that limit their access to international markets despite the reductions in tariffs and quotas. The UNIDO trade capacity-building initiative is based on three fundamental pillars: (a) national manufacturing capability for global market competitiveness; (b) proved ability to conform to international standards and regulations; and (c) opportunity to connect to target markets. Under this initiative, UNIDO initiated several projects. In West Africa, in cooperation with the European Union (EU) and the West African Economic and Monetary Union, UNIDO developed a subregional programme aimed at facilitating the access of the countries of the West African Economic and Monetary Union, to regional and international trade. UNIDO has already established a regional system for accreditation; set up regional and local networks of specialized laboratories; harmonized procedures for testing and analysis of products; introduced quality systems in more than 16 laboratories and 50 enterprises; organized training for more than 500 engineers and auditors; and provided a complete collection of international standards. Regional programmes were also launched for Mekong Delta countries, funded by the Norwegian Agency for Development Cooperation (NORAD), and for Central America, funded by UNIDO.

26. **Service module 4** focuses on strengthening the private sector, which is the main driving force of industrial development. In particular, UNIDO services seek to promote the development of SMEs and include information services, a business partnership programme, SME cluster and networking development, and rural and women's entrepreneurship development.

27. Building on ongoing activities, in Uganda an entrepreneurship curriculum was introduced in secondary education, offering some 400,000 students annually exposure to entrepreneurial culture, attitude and practices. Project proposals to address specific needs in afflicted countries, including Afghanistan, Angola, Burundi, Guinea, Sierra Leone and Timor-Leste, were elaborated for post-crisis assistance and submitted to donors, including the United Nations Trust Fund for Human Security, funded by Japan.

28. A joint UNIDO/International Labour Organization (ILO) global training programme on SME cluster development, drawing on the specific experience of both organizations, was designed for policy makers in developing countries to help SME clusters meet their potential in globalized economies. The second phase of the Business Partnership Programme for the Automotive Component Industry, in India, and a similar programme in South Africa were launched.

29. This service module also covers UNIDO activities in support of Millennium Development Goals 3 and 8, and includes both the UNIDO women entrepreneurship development programme and the Organization's business partnership programme. The former is aimed at helping to promote gender equality through the socio-

economic empowerment of women, while the latter is specifically aimed at pulling together the complementary resources of the United Nations, relevant research institutions and the business community for the benefit of SMEs.

30. **Service module 5** assists in enhancing the productivity of agricultural processing industries, and thereby in enabling them to increase output and exports, create employment and generate increased income and value added from the agricultural sector, which typically plays a predominant role in their economies. UNIDO focuses on increasing productivity, trade facilitation, employment-generation, capacity-building and techno-economic assessments.

31. In Ethiopia, 82 post-harvest pilot demonstration stations were created, increasing the revenues of farmers and reducing post-harvest losses by 10 per cent in the first year of operation. In Uganda, a hybrid dryer for fruits and vegetables, developed in Burkina Faso, was successfully installed, enabling producers to double their exports of dried organic fruits. In three regions of Burkina Faso, operational dyeing and weaving units were established which, equipped with appropriate technology and modern equipment operated by trained artisans, were able to produce quality products. Through training programmes, skills were upgraded at 20 agro-machinery manufacturers in Nigeria, producing cassava-processing machinery.

32. **Service module 6** addresses the fact that energy, while an essential prerequisite for industrial and economic development, is also a major source of global pollution and waste, and therefore seeks to assist the countries concerned in meeting their energy requirements while minimizing the resulting environmental risks, in particular the threat to the global climate arising from greenhouse gas emissions. The individual services include rural energy for productive use with emphasis on renewable energy and energy efficiency. UNIDO has started a number of projects on renewable energy in developing countries including Malawi, Zambia, Cuba, Mozambique, Uganda and the United Republic of Tanzania. In regard to capacity-building for international cooperation in energy, a trust fund agreement for \$40 million was signed between UNIDO and the Ministry of Energy and Natural Resources of Turkey to establish and operate an International Centre for Hydrogen Energy Technologies.

33. **Service module 7** is the Organization's ongoing programme to support the phasing out of ozone-depleting substances in accordance with the targets set by the Montreal Protocol on Substances that Deplete the Ozone Layer,³ in particular by the developing countries covered in article 5 of the Protocol. By the end of 2003, UNIDO had developed over 900 Montreal Protocol projects in 68 countries worldwide, with a total budget of over \$355 million, of which more than 620 projects with a value of some \$220 million were completed, phasing out substances with an ozone-depleting potential (ODP) of some 31,000 tons. In 2003 alone, the phase-out amounted to a record 7,000 ODP tons.

34. **Service module 8**, which constitutes the Organization's response to the fact that all industrial activities create a burden on the environment, even though the revenues gained from these activities create the basis for our well-being, seeks to mitigate these threats by promoting both pre-emptive measures, including the use of cleaner production technologies, and ex post measures, including end-of-pipe treatment of pollutants and other environmental clean-up measures.

35. The cleaner production programme now focuses on investment promotion and transfer of environmentally sustainable technologies and increased cooperation among UNIDO branches and services as well as cooperation with other United Nations organizations. A regional project on combating coastal area degradation and depletion of living resources in the Guinea Current Large Marine Ecosystem was approved by the Global Environmental Facility (GEF) Council in November with a GEF budget of \$21.5 million. The countries included in the project are Angola, Benin, Cameroon, the Congo, the Democratic Republic of the Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Ghana, Guinea, Guinea-Bissau, Liberia, Nigeria, Sao Tome and Principe, Sierra Leone and Togo.

IV. Cooperation for development

36. To make a distinctive and constructive contribution to the task of working towards Millennium Development Goals, UNIDO actively explores possibilities of cooperation with other international organizations, and participates in the inter-agency coordinating mechanisms and the United Nations system-wide initiatives.

37. Focusing on the priority areas where the best results can be achieved UNIDO has made significant progress in developing cooperation with the World Trade Organization and the Organization for International Standardization (ISO) in the field of technical barriers to trade. The memorandum of understanding on technical cooperation formalizes a strategic partnership between UNIDO and the World Trade Organization for the implementation of the Doha Development Agenda. Its aim is to achieve a palpable increase in developing-country exports by removing supply-side constraints, developing and proving conformity to technical requirements and integration into the multilateral trading system. The group of countries to be covered for assistance initially are Armenia, Bolivia, Cambodia, Cuba, Egypt, Ghana, Jordan, Kenya and Mauritania. The strategic partnership with ISO was established to ensure that standardization and industrial development enhance economic growth and to assist the beneficial integration of developing and least developed countries and economies in transition into the global economy. With the United Nations Conference on Trade and Development (UNCTAD), a joint cooperation programme on integrating least developed countries into global trade was developed.

38. In cooperation with the United Nations Development Programme (UNDP), ILO, the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), the World Health Organization (WHO) and the World Bank, UNIDO is developing and implementing various projects in developing countries in the field of SMEs development, agro-industries and other sectors. Cooperation with the United Nations Environment Programme (UNEP) is focused on the promotion of clean technologies and building national cleaner production capacities. A comprehensive network of the Cleaner Production Centres has been established covering 30 countries. One thousand and twenty technicians specialized in cleaner production have been trained and more than 24,000 representatives from different industrial sectors were covered by awareness-raising seminars and workshops.

39. Working towards better cooperation with EU, UNIDO continued to actively exploit its potential. To facilitate the funding by the European Commission of UNIDO programmes and make the handling of funds more transparent and,

consequently, project implementation more efficient, UNIDO and EU signed the Financial and Administrative Framework Agreement.

40. Following its chairmanship of the High Level Committee on Programmes (HLCP), the Organization has continued to play a visible role in the work of the United Nations System Chief Executives Board for Coordination (CEB) and HLCP, focusing its interventions on the implementation of the United Nations Millennium Declaration,⁴ follow-up to the International Conference on Financing for Development and the World Summit on Sustainable Development, multilateralism and United Nations reform. Advocating the need for a stronger emphasis on economic development and a corresponding strengthening of coordination among the relevant United Nations entities as an essential factor with respect to promoting concrete progress towards Millennium Development Goals, UNIDO drew the attention of HLCP and CEB to a proposal to enhance system-wide policy coherence and operational effectiveness that aims at renewing the United Nations economic development functions in the context of the United Nations Millennium Declaration and emphasizes the need to redress the current undersupply of specific public goods such as market efficiency, knowledge and environment, and to enhance the links between economic and social development in order to improve the prospects for achieving the Millennium Development Goals and make that process sustainable. This could be achieved, inter alia, through a voluntary mechanism such as a common business plan.

41. The involvement of UNIDO in the United Nations Development Group contributed to the development of an “institutional position of UNIDO” in the context of implementing the Millennium Development Goals at the country level. The participation of UNIDO concentrated on the gradual internalization of the Millennium Development Goals as the operational framework for the United Nations country teams, including monitoring, analysis, campaigning and operational activities.

42. In May 2003, UNIDO became the fifth core United Nations body in the Global Compact (following ILO, the Office of the United Nations High Commissioner for Human Rights, UNEP and UNDP). The participation of UNIDO in the Global Compact is aimed at meeting the specific needs of SMEs. This is a result of the recognition bestowed by the United Nations system on the Organization’s operational efforts in developing business partnerships; its support of SME development; its research efforts on exploring the implications of Corporate Social and Environmental Responsibility for SMEs in developing countries; and its spearheading of United Nations system activities in supporting environmentally and socially responsible entrepreneurship.

43. UNIDO continued to play a significant role in the United Nations Millennium Project developed to help in formulating the best strategies for achieving the Millennium Development Goals. As an active member of the United Nations Experts Group, which oversees the working of the whole project, Task Force 1 on Poverty and Economic Development, and Task Force 10 on Science, Technology and Innovation, UNIDO makes a direct contribution to the Millennium Project by sharing its expertise on the relevant subjects. Also, in this context, UNIDO is holding talks with the Earth Institute with a view to developing a series of projects in alternative energy and rural development, which will become part of the implementation of the Millennium Project.

V. Focus on Africa and the least developed countries

44. Africa and the least developed countries remain at the core of UNIDO priorities in line with the Business Plan. A good indicator of the focus on African countries in UNIDO technical cooperation activities was their share of integrated programmes and country service frameworks. At the end of 2003, 24 integrated programmes or country service framework were under implementation in the region, with a total budget of \$152 million, of which \$110.1 million was allocated for 19 programmes in sub-Saharan Africa.

45. To address the specific needs of African least developed countries, UNIDO launched the African Productive Capacity Initiative (APCI). As the component on sustainable industrial development of the New Partnership for Africa's Development (NEPAD) (A/57/304, annex), APCI is designed to increase the share of manufactured products and services and to create environment-friendly productive entities and generate sustainable jobs.

46. The Initiative will gradually integrate the current integrated programmes in Africa, including those for least developed countries, which would become the national pillars of the respective subregional APCI. Moreover, ongoing regional programmes in West Africa, which counts 11 least developed countries, will be included in the West African Productive Capacity Initiative that has targeted local manufacturing of at least 25 per cent of West African cotton, of which such least developed countries as Mali, Burkina Faso and Senegal are among the largest producers of the subregion. At present, 95 per cent of the cotton produced in West Africa is exported as raw material.

47. In other respects, taking into account the successful experience and results gained in a trade capacity-building project for Sri Lanka during the period 2001-2003, UNIDO and NORAD launched a similar project for the Mekong Delta countries and South Asian least developed countries, with a NORAD contribution amounting to \$2.5 million. With an objective of overcoming technical barriers to trade in the region, the project focuses on developing the necessary technical infrastructure for laboratories and also on effecting the global recognition of the laboratories.

VI. *Industrial Development Report, 2004*

48. Second in the series of Industrial Development Reports, *Industrial Development Report, 2004: Industrialization, Environment and the Millennium Development Goals in Sub-Saharan Africa: The New Frontier in the Fight Against Poverty*, focuses on the dynamic processes of productivity growth, wealth-creation and social advancement in sub-Saharan Africa in the context of the internationally agreed development goals and targets of the United Nations Millennium Declaration and the national poverty reduction strategies.

49. While the number of people living in absolute poverty as a proportion of the total world population *fell* between 1981 and 2001, from 40 to 21 per cent, in sub-Saharan Africa, the proportion *rose*, from 42 to 47 per cent.

50. The economies of sub-Saharan Africa (with notable exceptions) have been in decline for a quarter of a century. Consequently, sub-Saharan Africa has become the

development challenge: While, based on present trends, most of the developing world will continue to converge with the developed world, the decline of sub-Saharan Africa has been in not just relative but absolute terms. As is widely recognized, the “overarching” Millennium Development Goals — the halving of poverty — is unattainable for the region *without* the reversal of overall economic decline. Subsequently, the economic opportunities of sub-Saharan Africa need to be carefully laid out and acted upon.

51. The estimates show that 30 countries of sub-Saharan Africa surveyed require annual gross domestic product (GDP) per capita growth rates of from 2 to 6 per cent to achieve the income poverty Millennium Development Goal by 2015. The landlocked economies are farthest from the goal: they need to grow by 4.9 per cent annually. Six landlocked countries should grow by more than 5 per cent. On the other hand, achieving the Millennium Development Goals in health and education themselves will reinforce growth: for example, as much as 1.5 percentage points in growth can be expected to follow from the achievement of non-income poverty Millennium Development Goals in landlocked economies. Overall, only a few countries appear to be on their way to reaching the income poverty Millennium Development Goals: Benin, Cape Verde, Equatorial Guinea, Malawi and Uganda have already reduced poverty and require per capita growth rates lower than 2 per cent to fully achieve their goals. Mozambique, Mauritania, South Africa and Botswana also face attainable growth-rate requirements.

52. In order to attain the sustainable economic growth required, countries of sub-Saharan Africa have to go through a period of structural change promoted by a demographic transition and supported by policies to ease the absorption of excess labour released by the agricultural sector into manufacturing jobs following significant gains in agricultural productivity. *Industrial Development Report, 2004* lays out the opportunities and the policy options for the sub-Saharan African countries with respect to transforming themselves through structural change, productivity growth and industrial development, including institutional and social capabilities for technological learning and productive capacity-building.

53. The experience of high-performing economies (the Republic of Korea, China, Chile, India, Malaysia, Indonesia, Thailand, Bangladesh, Mauritius, Sri Lanka and Viet Nam) that, having started at levels of income similar to those of countries of sub-Saharan Africa today, managed to achieve rates of growth similar to those required by these countries to reach the Millennium Development Goals, suggests that even if countries of sub-Saharan Africa manage to set out on a route of structural change today, the full benefits might not necessarily be available before 2015. The experience of those high-performing economies also shows that agricultural development is a key platform from which industrialization may take off. Since the productivity levels in the agricultural sector of sub-Saharan Africa are currently very low, there is significant potential for productivity gains owing to compositional change as well as technological improvements.

54. The targets related to industrial development can be derived from the Millennium Development Goals, and can be fully consistent with them. In order for income poverty to be cut by half in sub-Saharan Africa, the growth rates required for industrial value added are estimated to be between 6 and 9 per cent. This requires additions to physical capacity: new factories, equipment and so on. However, simply building capacity is not the answer to African industrial problems.

It is more important to build *capabilities*: to operate plants at competitive levels, raise quality, introduce new products, upgrade practices and diversify into higher value added activities. Although this also requires investment, a set of resources more precious than money are needed: skills, organization, knowledge, information, technology and institutions.

55. Central to the capability-building effort are the private sector development strategies, inasmuch as firms are the main agents of change in an economy. Hence, private sector development strategies and their contribution to poverty reduction are among the major themes of the *Industrial Development Report, 2004* which, in this regard, pays attention to the ways in which poverty reduction strategies can be enhanced by greater private sector participation in the design and implementation process.

56. Although *achieving* the Millennium Development Goals in sub-Saharan Africa will demand large public investment in social overheads, *sustaining* the Millennium Development Goals will depend substantially on the nature and sturdiness of the private sector response to poverty reduction strategies. There is no reason why private sector development policies should wait until the Millennium Development Goals are achieved. However, while it is common to see Poverty Reduction Strategy Papers (PRSPs) — which are main national policy tools with which to achieve the Millennium Development Goals — highlighting the role of the private sector as the main driver of sustainable economic growth, scant attention is paid to how, precisely, this private sector-driven growth is to be achieved. Experience shows that there is no “magic bullet” formula for achieving the strong private sector response needed to halve African income poverty in little more than a decade; however, PRSPs need to address shortcomings in respect of private sector development, including industrialization and structural reform and institution-building so that the micro- and macrofundamentals can be knitted.

57. Recent PRSPs include measures to improve the regulatory environment as well as explicitly target improved governance and reduced corruption as priority measures for stimulating private sector investment. However, PRSPs need to go further than this by incorporating functional private sector promotion policies to enhance productive capacity and productivity performance. Here, the technological infrastructure institutions and extension services for the SME sector play a vital role, as does the implementation of policies that are gender-sensitive and that can use the opportunities offered by the special and differential rules of the international system. Rural and informal sectors of the economy are vital for poverty reduction and hence this issue should also be critically addressed.

58. Trade policy integration into the overall strategy is still very weak in the case of most PRSPs. This is a significant hindrance, as many countries now recognize the potentially detrimental effect of trade-capacity deficiencies. In particular, the ability to tap into global production networks, through participating, for example, in offshoring and outsourcing arrangements, requires the building of productive capacities and the provision of technological services such as those related to testing, metrology, certification and accreditation. Some of these capabilities can be built most effectively on a regional basis and, in particular, the New Partnership for Africa's Development can be utilized to facilitate such capacity-building efforts and encourage deeper forms of business, government and donor cooperation in these fields.

59. An important aspect of private sector development strategies is their provision of further venues and financing opportunities for the implementation of other goals of poverty reduction strategies. However, the experience of private-sector capital formation in sub-Saharan Africa in the last 20 years has been rather bleak: the average rate has been only about 10 per cent of GDP, at a time when, by and large, sub-Saharan Africa has been a net exporter of capital. Significantly, foreign direct investment (FDI) and repatriation of capital, which can be important sources of growth, do not receive much attention in the PRSPs. Attracting foreign investment as well as encouraging repatriation of sub-Saharan African private savings relies, in turn, on the capacity of policy makers of sub-Saharan Africa to design policies to overcome the structural impediments as well as actively promote investment through various means, including effective Investment Promotion Centres and Productivity Councils.

60. As least developed countries of sub-Saharan Africa are particularly prone to exogenous shocks, it is also important to include market-based mechanisms to absorb the negative impacts of terms-of-trade shocks or natural disasters so as to enable the vulnerable real sector to cope with such setbacks during the course of the strategy's implementation. The poverty reduction strategies should consider a variety of mechanisms, such as cooperatives, insurance systems and revolving funds, depending on the specific types of shocks to which the countries are prone, that would help regenerate productive capacity and bring about stability.

61. The *Industrial Development Report* also aims at guiding an industrial policy formulation that is environmentally sound and forward-looking in terms of diffusion of emerging technologies. According to most indicators of pollution, environmental degradation first increases with growing income, and only after reaching a critical turning point, does it start to decline. For biological oxygen demand (BOD) as a measure of water pollution, this turning point comes only at a very advanced level of development (annual per capita income of \$20,000). For global pollutants such as carbon dioxide (CO₂), the turning point occurs beyond the observable income range of industrialized countries. All this suggests that without intervention, environmental degradation will get much worse before — and if — it gets any better — entailing a delay that countries of sub-Saharan Africa cannot afford.

62. The implication of these findings for policy and international technical assistance is that policy interventions have a role in the earlier stages of development. The structural change implicit in attaining the growth rates demanded by the Millennium Development Goals means that ways must be found to achieve the kind of sustainable industrial development that will allow countries of sub-Saharan Africa to prevent early enough the harmful link between industry and pollution from being forged.

63. The *Industrial Development Report* argues that, while sub-Saharan African policy makers need to face significant challenges while building up technological capabilities to overcome such problems, there is an important role for the international community with respect to supporting the capacity-building needs of these countries, for example, by aiding the diffusion of environmentally sound technologies. In the long run, a crucial factor for the uptake of emerging technologies, as well as the diffusion of environmentally sustainable technologies in sub-Saharan Africa is private sector investment in these fields. Given the current low level of development of markets in sub-Saharan Africa, this will require

creative policy interventions to ensure that the constraints binding private sector development are gradually eliminated. More work needs to be done to create explicit links between the public sector and private institutions such as universities, research and development (R&D) laboratories and firms that have been successfully employed in other developing countries.

64. The second part of the *Industrial Development Report* studies the industrial development trends across the globe and expands the Industrial Development Scoreboard, introduced in the previous issue, with an improved coverage of countries and years. This part also includes the Competitive Industrial Performance (CIP) index, which gives a global overview of the diversity of industrial competitiveness and provides an assessment of the main factors affecting this performance.

VII. Field presence of UNIDO

65. To provide a better contribution to the work towards achievement of the Millennium Development Goals at the country level, UNIDO continued efforts to enhance its field presence which is an important factor with respect to implementation of UNIDO operational activities. By the end of 2003, UNIDO was present in 35 countries with 9 regional offices, 20 country offices and 6 focal points, of which 14 were in sub-Saharan Africa, 6 in the Arab States, 9 in Asia and the Pacific, 2 in Europe, and 4 in Latin America. The structure of UNIDO field offices is complemented by the Investment and Technology Promotion Offices network.

66. Within the process of decentralization, more authority was delegated to the field, and some UNIDO Representatives were given the responsibility of assuming the role of team leader of UNIDO integrated programmes at the country level, and obtained overall financial responsibility in this regard.

67. In the context of the Secretary-General's efforts to enhance coordination and work-related impact at the country level, UNIDO is actively involved in common country assessment/United Nations Development Assistance Framework (CCA/UNDAF) and PRSP processes to ensure that opportunities available through industrial development are given full consideration in the process of developing country programmes. A good example of the involvement of UNIDO in the design and implementation of the PRSP is provided by the case of Senegal, where UNIDO acts as the lead agency of the United Nations system in Senegal with respect to implementing Millennium Development Goals and the PRSP in the poorest region of the country (Tambacounda) through UNDAF. In particular, the second phase of the UNIDO Integrated Programme for Senegal includes an Industrial Upgrading component (\$1.3 million) which has important linkages with PRSP implementation and private sector development. Another example is provided by Cameroon, where UNIDO is the main executing agency for the UNDP project for PRSP implementation in the area of private sector development.

68. To enhance the impact of operational activities at the country level and in response to the initiatives of the Secretary-General, UNIDO is seeking cooperation with other United Nations organizations. In this context, UNIDO has initiated a dialogue with UNDP that will help to identify better ways to work together.

VIII. Conclusions and recommendations

69. The Millennium Development Goals are more than targets set by the international community for minimum levels of human and social well-being in poor countries. They are also basic *preconditions* for sustained economic development.

70. The achievement of the Millennium Development Goals, particularly the halving of income poverty, requires faster economic growth, especially in those countries where poverty is already worst and where the recent economic performance has been the weakest. The poorest countries, especially in sub-Saharan Africa, pose the greatest challenges in terms of required growth rates in order to achieve the Millennium Development Goals. The estimates show that 30 countries of sub-Saharan Africa surveyed require annual GDP per capita growth rates of from 2 to 6 per cent to achieve the income poverty Millennium Development Goal by 2015. The landlocked economies are farthest from the goal: they need to grow by 4.9 per cent annually.

71. Industrial development has a critical role to play in helping to raise growth rates. It is the motive force for applying new technologies to production and the most important source and diffuser of technological innovation. It creates new skills and work attitudes, catalyses institutional change and breeds modern entrepreneurship. It offers the best way of modernizing the export structure and creating the base for sustained export increase along with higher wages. Successful industrialization helps create the employment that poor economies need as they release labour from agriculture, both directly and by stimulating the development of modern services.

72. A number of external and domestic policy interventions are needed to reinforce the relationship among Millennium Development Goals, poverty reduction and productivity growth in an environmentally sustainable manner. These interventions primarily work by unleashing the growth potential and thus establishing the necessary framework for productive sector development. Productive capacity-building and, particularly, private sector development strategies play an important role by promoting economic diversification, structural change and export capabilities. In addition, technology diffusion, and the provision of public goods associated with it, play a key role in upgrading the capabilities required for industrial development. In this context, the achievement of the Millennium Development Goals and the formulation of national poverty reduction strategies in tune with the productive capacity-building needs of the economy are critical policy shocks required in order for developing countries to break out of the pervasive poverty trap by which they are haunted, and unleash their growth potential.

73. Given the critical role of industrial development for the achievement of the Millennium Development Goals, there is the stronger need for an intergovernmental body like UNIDO to provide international public goods that promote productivity growth.

74. In exercising its mandate to promote sustainable industrial development in developing countries and economies in transition, UNIDO has made a comprehensive review of its services to ensure their alignment with the requirements of the Millennium Development Goals. The UNIDO corporate

strategy entitled “Productivity enhancement for social advance” was developed as a means of proposing a new approach for UNIDO activities and interventions, with a better focus on productivity growth. Thus, the impact of UNIDO activities and their contribution to the achievement of the Millennium Development Goals were significantly enhanced. The positive experience of UNIDO in this regard, and its best practices and activities, could provide a useful guide for other United Nations system organizations in their efforts aimed at achieving the Millennium Development Goals.

75. UNIDO actively explores cooperation with the rest of the United Nations system at both the headquarters and country levels to enhance contribution to the achievement of the Millennium Development Goals. With its central coordinating role within the United Nations system in the field of sustainable industrial development, UNIDO is encouraged to continue playing an active role in the United Nations coordinating mechanisms, including CEB/HLCP, and to promote better policy coherence in the field of economic development which could be achieved, inter alia, through a voluntary mechanism such as a common business plan to address the current undersupply of specific public goods such as market efficiency, knowledge and environment.

Notes

¹ United Nations publication, Sales No. E.02.II.B.13.

² United Nations publication, Sales No. E.04.II.B.22.

³ United Nations, *Treaty Series*, vol. 1522, No. 26369.

⁴ See General Assembly resolution 55/2.

Annex

Global Biotechnology Forum

Information note

I. Background

1. The Global Biotechnology Forum (Concepción, Chile, 2-5 March 2004) was organized jointly by the United Nations Industrial Development Organization (UNIDO) and the Government of Chile with support from the International Centre for Genetics and Biotechnology.
2. The overall objective of the Forum was to explore the development potential of biotechnology in the developing countries and economies in transition. In particular, the Forum was convened to examine biotechnological opportunities and challenges, constraints affecting the development and diffusion of biotechnology, ways and means of capacity-building in relation to scientific and business skills, potential for biotechnology contributions to industry, and mechanisms of technology transfer.
3. The convening of the Forum was based upon a fundamental commitment by the United Nations and its organizations to the promotion of biotechnology for the enhancement of living standards and the quality of life. In particular, chapter 16 of Agenda 21,^a the work programme adopted by the United Nations Conference on Environment and Development in 1992, had outlined the potential of biotechnology to contribute to sustainable development by increasing the availability of food, and renewable materials, improving human health and enhancing protection of the environment.
4. At the Forum, UNIDO focused its contribution on industrial biotechnology and its potential applications for raising productivity, effective environmental management and enhancing sustainable livelihoods for poverty alleviation. It is noteworthy that chapter 16 of Agenda 21 had conferred an explicit mandate on UNIDO in regard to the environmentally sound management of biotechnology.

II. The Forum and its outcome

5. The Forum was preceded by four regional meetings covering Africa (Nairobi, March 2003), Latin America and the Caribbean (Brasília, July 2003), Europe (Vienna, December 2003) and Asia and the Pacific (Chengdu, China, December 2003). The various issues and ideas for potential initiatives raised at the regional meetings, together with detailed information for each region, had provided a substantive background against which deliberation and discussion at the Forum took place. Its programme was organized around plenary sessions, parallel meetings and working groups. The following thematic areas were addressed:

- Biotechnology, biopharmaceuticals and the health industry.
- Biotechnology and the agro-food industry.
- Biotechnology, biodiversity and bio-industry.
- Technology transfer.

- Trade, regulation and social acceptance of biotechnology.
- Forestry.
- Biosafety (biosafety: harnessing information technology for decision support, and biosafety: mechanisms to ensure regulatory compliance).
- Inter-agency cooperation.
- Public-private partnerships and development of small and medium-sized enterprises (SMEs).

6. The Forum was attended by some 1,500 participants from over 80 countries with ministerial-level representation from a number of States. Many United Nations and other organizations, including the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Conference on Trade and Development (UNCTAD), the Food and Agriculture Organization of the United Nations (FAO), the World Health Organization (WHO), the World Trade Organization and the Organization for Economic Cooperation and Development (OECD), were represented by senior officials. Representatives of a number of non-governmental organizations also attended.

7. During the preparatory process and the Forum itself, a number of barriers to progress in biotechnology in developing countries were identified including: inadequacy of human resources (for example, in respect of research, commerce, management) and physical resources (for example, in infrastructure and facilities); low levels of financial support and investment; lack of policy instruments (for example, in science and technology, regulation, investment) and of capacities to exercise regulatory oversight (for example, biosafety, intellectual property protection, trade); and limited access to knowledge and technology.

8. A Final Statement adopted by the Forum identified the following four major areas for new initiatives and proposals to be further considered and developed by the United Nations system organizations in accordance with their respective mandates and subject to approval by governing bodies, other international development partners, the scientific community and the private sector:

(a) Formation of a multi-stakeholder forum, involving specialized agencies of the United Nations system and other international bodies together with representatives of government, industry and the scientific community, to serve as an ongoing platform for informed dialogue on biotechnology and the way in which its benefits may be used for the enhancement of developing countries;

(b) Creation of an information network and database regarding what biotechnology activities are currently in progress in the countries with economies in transition and developing countries, together with market information provided on a global basis to assess technology and market potentials for new initiatives, inter alia, for the purpose of identifying and facilitating partnerships;

(c) Enhancement of efforts for the mobilization of resources for capacity-building;

(d) Examination of the impact of and ways to facilitate access to intellectual property to promote the exploitation and dissemination of biotechnology in developing countries.

9. In follow-up to the Forum, the key task is to propose concrete actions falling within the four framework areas of the Final Statement. The outcome of the Forum was presented at the twenty-eighth session of the UNIDO Industrial Development Board, held from 25 to 27 May 2004. In Board decision IDB.28/Dec.6, entitled "Global Technology Forum", adopted at the 6th plenary meeting, on 27 May 2004, the Board called upon the Director-General to take into account the Final Statement of the Global Biotechnology Forum in planning and implementing relevant follow-up activities fully within the mandate of UNIDO.

Notes

- ^a *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992*, vol. I; *Resolutions Adopted by the Conference* (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex II.
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