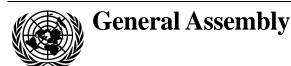
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Progress to date and remaining gaps in the implementation of the outcomes of the major summits in the area of sustainable development, as well as an analysis of the themes of the Conference

Objective and themes of the United Nations Conference on Sustainable Development

Report of the Secretary-General

Summary

The present report examines the two themes of the United Nations Conference on Sustainable Development — green economy in the context of sustainable development and poverty eradication, and the institutional framework for sustainable development — in relation to the objective of renewed political commitment to sustainable development, reviewing progress and implementation gaps and addressing new and emerging challenges. The starting point is the recognition that sustainable development, with each of its three pillars reinforced and mutually reinforcing, has been the overarching goal of the international community since the United Nations Conference on Environment and Development, held in Rio de Janeiro in 1992. Thus, the question posed here is how a focus on a green economy in the context of sustainable development and poverty eradication and the institutional framework for sustainable development can help to accelerate progress on the sustainable development agenda. The main messages are as follows:

(a) Countries at all levels of development have been implementing nationally tailored policies and programmes that are consistent with a green economy in the context of sustainable development and poverty eradication;

^{*} A/CONF.216/PC/6.





- (b) A growing number of countries are experimenting with a more comprehensive reframing of their national development strategies and policies along green economy lines, including as "low-carbon green growth" strategies;
- (c) Their combined impact does not yet add up to changes in production and consumption patterns on a scale equal to the challenges;
- (d) An early focus on "win-win" opportunities which realize that significant short-term co-benefits can build confidence in and support for a green economy in the context of sustainable development and poverty eradication;
- (e) Whether countries derive poverty reduction benefits from their green economy efforts often depends on sustaining and deepening conventional social spending, on health, education and targeted income support for the poor;
- (f) Improved institutions are crucial to the favourable social outcomes of green economy policies;
- (g) Moving towards a green economy in the context of sustainable development and poverty eradication is as much about structural change in the institutions governing economies at different levels as about technological change;
- (h) The reach of the institutional framework for sustainable development has expanded since the watershed Rio Conference, but the lack of coordination and coherence has held back the full potential; addressing this is now overdue.

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I. Introduction

- 1. Recalling General Assembly resolution 64/236, the present report provides a perspective on the objective of the United Nations Conference on Sustainable Development to secure renewed political commitment for sustainable development, reviewing progress and remaining implementation gaps and assessing new and emerging challenges as well as the two themes stated therein, namely, a green economy in the context of sustainable development and poverty eradication and the institutional framework for sustainable development.
- 2. The report should be read in conjunction with the synthesis report (A/CONF.216/PC/8), based on questionnaire responses received from Member States, major groups and United Nations system agencies, which elaborates on the objective of the Conference, progress and gaps, and new and emerging challenges as well as the two themes.
- 3. The perspective taken in the present report is to look at the objective of the United Nations Conference on Sustainable Development through the lenses of the two themes. The question posed is as follows: how can a focus on the two themes help us to accelerate progress on each of the three pillars, and towards convergence among the three pillars, of sustainable development? How can it advance the objective of renewed political commitment to sustainable development?

II. How can a green economy contribute to sustainable development and poverty eradication?

A. Context and concept

- 4. Sustainable development emphasizes a holistic, equitable and far-sighted approach to decision-making at all levels. It emphasizes not just strong economic performance but intragenerational and intergenerational equity. It rests on integration and a balanced consideration of social, economic and environmental goals and objectives in both public and private decision-making.
- 5. The concept of green economy focuses primarily on the intersection between environment and economy. This recalls the 1992 Rio Conference: the United Nations Conference on Environment and Development. Prior to the Conference, the predominant discourse was one of trade-offs between economic and environmental goals. The Conference was a major step towards recognizing the importance of synergies. The World Summit on Sustainable Development, held in Johannesburg, South Africa, in 2002, stressed the social pillar, with a reminder that, while economic progress often fosters social progress, the link is not automatic, and that ultimately economic development is a means to improving human well-being. Both the Rio Conference and the Johannesburg Summit enhanced appreciation of the importance of healthy ecosystems and a healthy environment to such improvements for present and future generations.
- 6. Despite progress since Rio, it has become apparent that a global economy based on current patterns of consumption and production is placing heavy stresses on many ecosystems and on critical life-support systems. At the same time, extreme

poverty persists in many parts of the world, despite the fact that world gross domestic product (GDP) has increased by roughly 60 per cent since 1992.

- 7. The past 20 years have seen an accelerated process of globalization, with production and consumption distributed across the globe being linked ever more closely through international trade, investment and production networks. Globalization has brought tremendous benefits for people living in both the developed and developing worlds. Hundreds of millions of people have escaped from poverty in no small measure by producing low-cost goods and services for global markets. Still, not all have benefited equally and many have benefited little or not at all from this process, but the process continues and more countries are being drawn into its orbit.
- 8. While growing prosperity makes it possible for countries to address some environmental problems, others have continued to worsen with globalization and expanding population and economic activities. Climate change, biodiversity loss, disruption of the nitrogen cycle: these are a few of the looming global problems.
- 9. The main challenge facing humanity now is to sustain the process of poverty eradication and development while shifting gears. Developed countries must shrink environmental footprints as fast and as far as possible while sustaining human development achievements. Developing countries must continue to raise their people's living standards while containing increases in their footprints, recognizing that poverty eradication remains a priority. This is a shared challenge with a goal of shared prosperity.
- 10. It is in this context that the concept of a green economy in the context of sustainable development and poverty eradication has gained pertinence. It can be seen as a lens for focusing on and seizing opportunities to advance economic and environmental goals simultaneously. Another concept with similar resonance green growth has garnered interest first in Asia and the Pacific and more recently in the Organization for Economic Cooperation and Development (OECD).
- 11. It is widely understood that broad-based economic growth has been and continues to be the most effective contributor to poverty eradication. At the same time, it is appreciated that, in the twenty-first century, growth will need to be associated with far less intensive energy and resource use and less pollution than historically. This is captured by the notion of green growth, which the Economic and Social Commission for Asia and the Pacific defines as growth that "emphasizes environmentally sustainable economic progress to foster low-carbon, socially inclusive development" (see http://www.greengrowth.org). The OECD definition is similar but emphasizes also green investment as "a driver for economic growth". ¹
- 12. The question of how prevalent and significant are environment-economy synergies and win-win opportunities is an empirical one, one that various international bodies, think tanks, and Governments are devoting considerable effort to answering. The United Nations Environment Programme (UNEP) Green Economy Initiative is a case in point.
- 13. While the work on a green economy to date has placed a particular emphasis on internalizing environmental externalities in prices to send the right signals to

¹ OECD, "Investment for green growth", 2010, available at http://www.oecd.org/document/41/0,3343,en_2649_34893_43783465_1_1_1_1_1,00.html.

producers and consumers, public policy for a green economy extends well beyond "getting prices right". If it does not, there is little chance that a green economy in the context of sustainable development and poverty eradication will be up to the task at hand of fundamentally shifting consumption and production patterns onto a more sustainable path. Governments have a critical role to play in financing green research and development and infrastructure investments and in providing a supportive policy environment for green investments by the private sector and for the development of dynamic green growth sectors. They also have a crucial role to play in ensuring that green economy policies support employment and income generation for the poor and vulnerable.

14. It has been noted by numerous Member States (India and others) that green economy does not "supplant" or substitute for sustainable development but rather is best understood as a means to achieving the end of sustainable development. It has also been stressed (India) that green economy should preserve "ample flexibility and space for national authorities to make their own choices and define their paths towards sustainable development based on national circumstances and priorities". While these formulations help to clarify the relationship between the two concepts, it is only practical experience that can demonstrate the effectiveness of green economy strategies, policies and measures as accelerators towards sustainable development.

B. Contribution of the green economy to growth and other economic objectives

- 15. During the past century, aggregate consumption of raw materials has continuously increased; regular improvements in resource efficiency and pollution control technologies have not been large enough to offset the effect of the increase in the size of the global economy.² The need for a system of production and consumption that imposes significantly lower pressures on natural resource stocks and the environment is now widely recognized. The green economy in the context of sustainable development and poverty eradication has emerged as a framework for moving in that direction. While it holds promise, it also poses daunting challenges; both are described in the present section with respect to growth and the economy.
- 16. The increased understanding of the risks posed by the current economic model arises at a time when many developing countries are on the threshold of major investments in energy, transport, waste, water and sanitation infrastructure, and sustained economic growth is seen as critical to the completion of the development transition. Would a green economy in the context of sustainable development and poverty eradication allow developing countries to complete their development transitions while laying the groundwork for sustaining high levels of human development for generations to come?
- 17. At the global level, the main question is how a green economy transition would affect global growth rates and patterns. Would green growth be slower growth, merely growth of a different kind, or perhaps even faster progress towards human development goals whether or not that translates into GDP growth as

² Fridolin Krausmann and others, "Growth in global materials use, GDP and population during the 20th century", *Ecological Economics*, vol. 68, No. 10 (2009).

conventionally measured?³ If there are "winners" and "losers" in a green economy transition, who would they be and how can Governments manage the transition?

Prospects for green growth

- 18. Green economy proponents argue that a green economy strategy would emphasize sectors that have been among the most dynamic, in terms of both growth and employment creation. For example, various studies have underlined the exponential growth of some renewable energy subsectors such as wind and solar, both in developing and developed countries. Enabling these "green" sectors to grow would deliver "double dividends", being beneficial both for the environment and for development. Green economy instruments such as investments in the maintenance and restoration of natural capital would directly contribute to growth through improvements in productivity (e.g., in agriculture) and creation of additional income-generation opportunities (through improved ecosystem services).
- 19. Economic sectors often mentioned as candidates for their "greenness" include health, education, cultural activity and other services, renewable energy and related technologies, resource- and energy-conserving investment, and investment in natural assets. To the extent that there is scope for growth concentrated in those sectors, with a concomitant decline of growth in energy and resource intensive activities, this would introduce a fundamental change in the nature of growth. As production and trade of services with low environmental impact have increased with globalization, these would also provide alternative opportunities for developing countries to find markets beyond manufacturing where they can specialize, scale up, and achieve high economic growth.
- 20. In practice, there is uncertainty about the long-term growth effects of structural changes of the types implied by the green economy in the context of sustainable development and poverty eradication. Long-term simulations of some versions of a green economy package have started to be undertaken, but are still in early days. Specific areas such as climate change mitigation have been more thoroughly investigated. Some models suggest that climate change mitigation policies could lead to long-run growth in global GDP compared to business as usual, for example, through higher investment in clean energy generation and induced technological innovation. Others suggest somewhat lower GDP at mid-century with greenhouse gas stabilization than without.⁴ In either case, the costs of inaction also need to be considered. According to UNEP, eliminating subsidies for fossil fuels would reduce greenhouse gas emissions globally by as much as 6 per cent and add 0.1 per cent to global GDP.⁵
- 21. Experience shows that some specific instruments normally included in the green economy mix can result in unchanged or higher growth with improved environmental outcomes. Evaluations of eco-tax reform, mostly in developed countries, suggest that in a number of contexts improvements in environmental outcomes were obtained at no or negative cost to employment and growth. India

³ See Joseph Stiglitz and others, "Report by the Commission on the Measurement of Economic and Social Progress", available at http://www.stiglitz-sen-fitoussi.fr/documents/ rapport_anglais.pdf.

⁴ Nicholas Stern, The Global Deal, New York, Public Affairs 2009, chap. 3.

⁵ UNEP, "A brief for policymakers on the green economy and Millennium Development Goals", September 2010.

recently imposed a carbon tax of 50 rupees (US\$ 1.00) per ton of carbon dioxide on both domestically mined and imported coal. Revenue generated by the tax goes into a clean energy fund, which invests in entrepreneurial ventures and research in the field of clean energy technologies. More generally, how revenues from eco-taxes are used can make an important difference to growth, employment and also equity.

Green economy, structural change and growth

- 22. From the point of view of individual countries, growth concerns may arise from the expected shifts in global demand away from resource- and energy-intensive commodities in which some developing economies specialize and towards green products and sectors in which they may lack competitiveness.
- 23. Whether individual countries will be able to attract investment in selected "green" sectors is an empirical question, the answer to which is likely to vary across countries. There is no a priori reason why countries that have faced difficulties in attracting domestic or foreign investment into traditional sectors would do better with "green" ones. They might, however, if green sectors would employ more intensively productive factors which particular countries possess in abundance, but the policy environment also matters critically to investment prospects. The attractiveness of a location is substantially greater where domestic policy rewards green investment, as for example with feed-in tariffs for renewable electricity.⁷

Bridging green technology gaps

- 24. Another commonly expressed concern is that a green economy, because it would promote technologies that are currently mastered mostly by developed countries, would disadvantage developing countries relying on conventional technologies. The greater ability of rich countries to finance and support research and development would also result in a loss of competitiveness of developing countries in key "green" industries, further increasing the technological gap. This fear may be reinforced by the results of simulation modelling that predict advantages for early movers into low-carbon industries such as renewable energy.⁸
- 25. One probably needs to distinguish here between groups of countries. Some developing countries offer counter-examples to this line of argument. For example, Brazil is at the frontier in terms of research and production of biofuels, while China is at the forefront of research, development and deployment of clean coal technologies. In renewable energy, the distribution of patents between developed and developing countries illustrates a changing picture where some developing countries are becoming important innovators.
- 26. While countries not among the innovators in green technologies would not share in the financial returns, they could still benefit as technology users if

⁶ India, Ministry of Environment and Forests, "India: taking on climate change. Post-Copenhagen domestic actions", New Delhi, accessed on 19 October 2010 at http://www.indiaenvironmentportal.org.in/content/india-taking-climate-change-post-copenhagen-domestic-actions.

⁷ United Nations, Department of Economic and Social Affairs, "A Global Green New Deal for climate, energy, and development", technical data, December 2009.

⁸ Economic modelling by the Cambridge Centre for Climate Change Mitigation Research (4CMR) suggests that there are significant opportunities for early movers who establish technological competence in emerging clean technologies.

competition among innovators and rapid deployment of the technologies drive down costs and make adoption ever more affordable. Ensuring strong competition in green technology markets is therefore critical, and competition policy can contribute to that end.

27. With respect to intellectual property, a global green economy package could promote the faster development of green technologies through collaborative arrangements that enshrine the sharing of technologies. A number of proposals have been made in the climate arena that could be a basis for progress — from the innovation centre and networks model agreed at Cancún under the Climate Technology Mechanism to forms of intellectual property rights that promote easier access and use by others.

Green economy and resource-dependent economies

- 28. A key component of a green economy is "getting prices right", that is, better reflecting environmental externalities in market prices, especially for natural resources. This includes the removal of environmentally harmful subsidies. The result would be to increase the prices of commodities such as oil, gas and minerals, at least in the short run. Countries that are net importers of these resources may fear that high prices could choke economic growth. This partly explains their preoccupation with lowering dependence on fossil fuel imports.
- 29. Natural resource exporting economies have their own concerns, which are the mirror image of those of net importers namely, that a major shift away from fossil fuels in the long run would hurt their growth prospects, unless they were able to diversify their economies successfully in the meantime. Recent International Energy Agency scenario analysis suggests, however, that major oil-producing countries would see only a small reduction in expected revenues over the period to 2030 in a 450 parts per million scenario compared to a business-as-usual scenario.⁹

Green economy and trade policy

- 30. Another channel through which a green economy transition could affect the growth of individual countries is "green protectionism" if, for example, a "multispeed" greening of the global economy were to lead to restrictions on trade through unilaterally imposed standards or border-price adjustments, with most of the impact likely to fall on developing countries. Lack of capacity to comply with stricter standards (especially in small and medium enterprises) could result in loss of markets. Reduced national export capacity could result in reduced growth and employment and deteriorating trade balances.
- 31. In practice, voluntary, market-led eco-labels and certification schemes are more commonplace than Government-mandated standards and labels. Two of the most mature are for tropical timber and coffee. These schemes can discriminate against producers without access to the latest technology and know-how, and also against small producers for whom the fixed certification cost can pose a barrier.¹⁰

⁹ Fatih Birol, International Energy Agency, speaking on the *World Energy Outlook 2009*, see http://www.cphpost.dk/news/commentary/142-commentary/47537-450--147.html.

¹⁰ United Nations Conference on Trade and Development, "Report of the Ad Hoc Expert Meeting on the Green Economy: trade and sustainable development implications", Geneva, 7-8 October, para. 22.

Government activities in relation to such schemes have focused principally on support to small producers in developing countries to facilitate participation.¹¹

- 32. Green subsidies, while they can play an important role in shaping local productive capacities and promoting investment in certain green sectors, can also distort trade. Considering these subsidies through a World Trade Organization prism, and in particular against the Agreement on Subsidies and Countervailing Measures, is useful for avoiding the proliferation of trade-distorting measures that lead to global inequities, especially considering that subsidies are very difficult to reform, such as those in agriculture. However, it might also limit policy space for the targeted promotion of sectors that contribute to the transition of a green economy.
- 33. Any analysis of the World Trade Organization consistency of a government subsidy is a complex task, and requires a detailed assessment of the measure, its implementation and the market impacts. The Agreement on Subsidies and Countervailing Measures does not outlaw all subsidies, but disciplines subsidies that distort trade, prohibiting export subsidies and local content subsidies; in addition, subsidies that can be proven to injure the domestic industry of another World Trade Organization member can be challenged under the Agreement.
- 34. The biofuel sector illustrates the issue. The low levels of international trade are generally attributed to the fact that most countries subsidize domestic production and use of biofuels. ¹² Major producing countries ¹³ show government assistance at all stages of the biofuel production and use chain. Fuel-tax reductions are the most widely used form of government support, but investment is also encouraged through reduced interest-rate loans, government-backed loan guarantees and significant support is provided for research and development efforts.

How to manage the transition? The role of public policies

- 35. The possible transition costs of a green economy in the context of sustainable development and poverty eradication are a concern to many countries. Changes in the structure of national economies would include adjustments to the structure of capital and labour supply. For example, in case of a rapid transition to low-carbon energy systems, some of the existing capital for energy production may become obsolete or redundant, which would imply additional costs compared to a business-as-usual scenario. Even in the favourable case where a green economy would result in net job creation at the national level, how would the new jobs compare in terms of skill and remuneration with those lost through structural change? What can be done to retrain displaced workers quickly?
- 36. These adjustments would require a leading role for public policies to avoid the negative effects on economic growth, employment and poverty. Countries have different capacities to deal with such adjustments and costs are of particular concern to low-income countries where demands on limited government budgets are already

11 The Netherlands Environmental Assessment Agency, "Role of Governments in multi-actor sustainable supply chain governance systems", 2010.

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¹² Toni Harmer, *Biofuels Subsidies and the Law of the World Trade Organization*, International Centre for Trade and Sustainable Development, Programme on Agricultural Trade and Sustainable Development, Issues Paper No. 20, 2009.

¹³ Brazil, Canada, China, India, the United States of America and the European Union.

- high. How would increased investment and social protection expenditures be financed? One option is to use eco-taxes, which generate revenue that could be used to support adjustments, if designed in ways that do not burden the poor.
- 37. The transition to a green economy in the context of sustainable development and poverty eradication can partly be accomplished through market incentives that internalize environmental costs and promote environmentally beneficial sectors, but these are a matter of public policy. Governments set the ground rules for markets that promote environmentally sound investment for example, tax incentives for purchases of fuel-efficient vehicles or solar power systems. The existing system of implicit or explicit government subsidies could also be redirected to promote sustainable development goals.
- 38. Developing countries require vigorous growth, and that growth can be directed increasingly towards carbon-saving investment and energy efficiency. Opportunities for growth in renewable energy are available both in developed and developing countries; seizing them has often depended on the active promotion of Governments. Several organizations have made similar proposals for an internationally funded "big push" to scale up renewable energy in developing countries, capturing learning economies and advancing the date for attaining cost parity with fossil fuels. ¹⁴ Government intervention is also crucial for social investment and infrastructure. If the infrastructure is energy-efficient, and if social investment is directed towards education and health services, there will be limited conflict between the economic activity generated and environmental protection.
- 39. Government policy plays a crucial role in determining which growth path will be followed. Government investment in infrastructure can lock in patterns of private investment that remain for many years, for example, by developing road or rail networks that determine transportation patterns and industry location in ways that can be environmentally beneficial or harmful.
- 40. Governments may also choose to stimulate investment in green technologies and sectors as part of explicit industrial and technology policies, on the expectation that these will emerge as major new growth drivers in the future.
- 41. At the international level, institutional changes will also be needed to support a shift to a green economy. Considering how financial systems, capital markets and trade rules encourage or hinder environmentally sound investments and green growth is paramount.

C. Possible impacts of a green economy on poverty eradication, livelihoods and other social outcomes

42. In the long term, it is believed that a development path limiting adverse environmental impacts would be more conducive to prosperity and poverty alleviation. Inasmuch as the poor are the most affected by trends such as climate change and environmental degradation and shocks such as food scarcity, shifts of the economy that decrease such risks will benefit the poor. For a green economy to deliver such benefits, it should be part of an overall movement towards production

¹⁴ United Nations, Department of Economic and Social Affairs, 2009 (see footnote 7 above); Deutsche Bank Climate Advisors' GET-FiT; Greenpeace; Renewable Energy Alliance.

and consumption systems that are compatible with sustainable development, through transitions sensitive to the developmental needs of each country. Poverty eradication and enhancement of the livelihoods of the most vulnerable deserve priority in measures promoting a green economy transition.

43. The implications of a green economy for poverty eradication and livelihoods can be analysed at different levels. At a first level, shifts in the average growth rates of individual economies could have implications for the ability of these economies to reduce poverty and improve social outcomes. At a second level, changes in the structure of national economies could affect employment opportunities and requirements, with different national capacities to deal with any adverse impacts. At a third level, specific green economy policies could, through the creation of sustainable livelihoods, additional jobs and other effects, increase the capacity of countries to translate growth into poverty reduction and other beneficial social outcomes.

Possible social effects of shifts in growth rates

- 44. A shift to a green economy might imply lower average growth for some countries or groups of countries, with the risk that poverty outcomes will worsen. To avoid this, the poverty reduction associated with a given growth rate would need to increase. Distributive policies could also help to ameliorate the adverse effects of slower growth on the poor. Ideally, if economies are sufficiently flexible, they would shift towards new growth drivers with strong poverty-reducing effects.
- 45. In addition to growth, the differences observed in the successes of individual countries in reducing poverty seem to be largely linked to social policies and institutional factors such as the distribution of productive assets. These can have long-term effects. For example, investments in basic education have proven to generate a poverty-alleviation and growth dividend many years after the initial investments are made.
- 46. There are structural differences among countries, even at similar levels of income, that affect the scope for national redistributive policies, including the shape of the national income distribution and the institutional and administrative capacity to collect taxes and make equity-enhancing income transfers.
- 47. Countries also vary in the way the poor are affected by changes in prices that might result from policies aimed at "getting prices right". The prices of food commodities have a particular importance for food security and poverty. If green economy policies for agriculture were to result even transitionally in higher food prices, this would be of particular concern to those low-income households and countries that are net food buyers.
- 48. At the level of national economies, the quantitative relationships between growth and poverty reduction exhibit a broad range of variation. There clearly exists no simple, one-size-fits-all strategy for poverty reduction. Green economy strategies that work best will be adapted to national contexts and yield a high income elasticity of poverty reduction.

Possible poverty effects of structural changes

49. Much discussion about the potential for green job creation was heard in relation to the green stimulus packages of Governments following the financial

crisis. In the context of high unemployment and idle capital, Government deficit spending on green investments could result in net job creation, with benefits for poverty reduction.

- 50. In particular, the job-creation potential of investment in renewable energy has been mentioned. According to the International Labour Organization (ILO), all forms of renewable energy have significantly higher employment elasticities than fossil or nuclear alternatives per unit investment, per unit installed capacity as well as per unit output. They also tend to concentrate employment less in the manufacturing and equipment-installation phase and provide more continuous employment during operation and maintenance.¹⁵
- 51. When capital and labour are fully employed, additional investment in green infrastructure, technologies or products replaces other investment. For a green structural shift to result in net job creation, investment in the green sectors has to be diverted from sectors that are less labour-intensive. Whether or not this holds is an empirical question. The results are likely to vary across economies, depending on economic structures and the incentives associated with green economy policies.
- 52. Structural changes in national economies caused by a shift towards a green economy would translate into adjustments to the composition and skill mix of the needed workforce. With limited short-run transferability of skills between sectors, a shift in labour demand to "greener" sectors may result in significant portions of the workforce requiring retraining. In the absence of adequate training capacities, retrenched workers will remain unemployed or will end up working in low-skill jobs. Even short spells of unemployment and income loss can translate into durable poverty episodes and lost opportunities (e.g., in access to education) for low-wage workers and their families.
- 53. The capacities of national Governments to deal with the adverse impacts of such adjustments differ widely. In developed countries, the welfare State works partially to compensate losers from the trade-adjustment process, for example, through unemployment benefits. Some countries have developed highly effective retraining schemes for unemployed workers. In most developing countries, however, such mechanisms are partial or non-existent. There is need for a strong social component to accompany the transition to a green economy, which considers the impacts of adjustments on broader social outcomes such as access to education, health and basic services.

Contribution of green economy policy tracks to poverty eradication and livelihoods

54. Specific green economy policies affect livelihoods, income distribution and other social outcomes through different channels and in different ways. Such policies are grouped here in seven "tracks": green stimulus packages; ecoefficiency; greening markets and public procurement; investment in sustainable infrastructure; restoration and enhancement of natural capital; getting prices right; and eco-tax reform.

¹⁵ ILO, "Global challenges for sustainable development: strategies for green jobs", Background Note, Group of Eight Labour and Employment Ministers Conference, Niigata, Japan, 11-13 May 2008.

Track 1 Green stimulus packages

- 55. Several countries incorporated sizeable "green" expenditures in their stimulus packages following the global financial crisis. Besides environmental benefits, the greening of stimulus packages was thought likely to deliver benefits in terms of jobs relative to investing the same amounts in a "traditional" package.
- 56. China, the Republic of Korea and the United States were among countries with large green stimulus packages. Yet, for many developing countries, large stimulus packages have not been an option, as they do not have the policy space to run counter-cyclical policies, being encouraged by the international financial institutions and financial markets to put macroeconomic orthodoxy at the forefront of their policies. ¹⁶ Also, for some developing countries, increased public debt could worsen conditions faced in capital markets, depending on the macroeconomic effects of the stimulus and its potential to create additional debt-repayment capacity.
- 57. Finally, what happens when the green stimulus money stops flowing? Will there be an enduring legacy in terms of the development of dynamic new green sectors? Evidence from the United States suggests that renewable energy stimulus spending has created numerous local solar panel installation businesses across the country. The But can they survive in a less conducive policy environment?

Track 2 Eco-efficiency

58. Eco-efficiency — the rational use of natural resources in production — has been adopted by many industries and it is a standard feature of most green economy definitions. Eco-efficiency is a firm-level concept grounded in business logic — improvements in production systems are made as long as they improve a firm's bottom line. By internalizing externalities, government tax or other policies can strengthen firms' eco-efficiency incentives. Eco-efficiency does not directly address social aspects. Indirect social benefits from improved resource efficiency are possible, for example, when water resources freed up by more efficient use by firms become available for other uses, or when better waste management or reuse of inputs reduces the amount of pollution.

Track 3 Greening of markets and public procurement

59. The greening of markets has been one prominent component of sustainable consumption and production policies. Public procurement has been increasingly adopted by Governments as a tool for steering the market into offering more environmentally and socially friendly products and services. Many countries in both developed and developing regions have used public procurement to pursue social goals directly.¹⁸

¹⁶ World Economic and Social Survey 2009: Promoting Development, Saving the Planet, United Nations publication, Sales No. E.09.II.C.1.

¹⁷ See http://businessjournalism.org/2010/10/10/dig-into-green-stimulus-monies-to-find-the-local-impact/.

¹⁸ United Nations, Department of Economic and Social Affairs, Sustainable Development Innovation Brief, No. 5 (August 2008).

- 60. In terms of poverty alleviation and livelihoods, sustainable public procurement potentially has both benefits and risks for producers in developing countries. Concern for the environmental and social impacts of production in public procurement could be beneficial if products and services produced by the poor and vulnerable segments of the population would gain access to markets in which they could otherwise not compete. Products from sustainable agriculture fall into this category. Another case where clear benefits could accrue to poor populations is when procurement requirements contribute to more sustainable management of the natural resources on which they depend (e.g., Forest Stewardship Council-certified timber).
- 61. On the other hand, increased requirements could be detrimental to producers in developing countries if they translate into additional barriers to trade, for example, for countries whose industrial structure comprises "dirty" industries, or where the capacity of small and medium enterprises to meet new standards is limited. Collective certification of groups of small producers for example, farmers has been one means of overcoming this barrier.

Track 4 Investment in green infrastructure

- 62. Renewable energy technologies can allow for creating small-scale, decentralized systems able to provide access to modern energy to poor populations. This is a crucial ingredient of development associated with: health benefits (e.g., from decreased indoor air pollution); increased employment and incomegeneration opportunities through access to electricity; and improved educational opportunities and outcomes.
- 63. Energy efficiency in buildings has been recognized as a key component of a green economy package. Investments in sustainable buildings and construction could provide multiple benefits, including job creation and reduced household bills for heating, cooling and cooking, thereby increasing the share of household income available for other uses. Locally adapted technologies exist, often using traditional techniques and materials, but various barriers slow the adoption even of "no regret" measures. ¹⁹ Innovative financing can help to address high upfront costs and long payback, for example, low-interest loans repayable through small monthly additions to electricity bills.
- 64. A sustainable development perspective looks beyond improvements to the building stock to consider urbanization as a whole. Urbanization will be a defining feature of coming decades, in particular in Asia and Africa, with continued large-scale migration of the poor from rural areas. To meet this challenge, it is critical to address new construction. A sustainable city must begin with ensuring that construction of new slums is not the only path to its future development. In many contexts, this means addressing gaps such as limited institutional capacity for integrated planning; inadequate enforcement of planning and zoning laws; non-existent or badly functioning land markets; and the unavailability of housing finance for large groups of the population.
- 65. Sustainable transport is an important contributor to mitigating environmental impacts. Beyond the transition to low-carbon mobility, critical for poverty

¹⁹ Final report of the Marrakech Task Force on Sustainable Buildings and Construction.

alleviation and livelihoods is inclusive transport. Given that the poor are less motorized than the rest of the population, this means first of all well-funded, efficient public transport networks. For the poor and vulnerable, non-motorized transport and walking and cycling are of particular importance. Governments have a critical role to play as providers of most transport infrastructure. For public transport to have a chance to compete for the pocketbooks of customers, the negative externalities caused by private vehicles have to be accounted for. As in other sectors, the transition to inclusive and sustainable transport implies cultural change on the part of politicians, city planners, transport engineers and citizens.

Track 5 Restoration and enhancement of natural capital

- 66. The importance of natural assets and the services they provide to poor communities has long been recognized. The Millennium Ecosystem Assessment was instrumental in providing a framework and detailed examples to understand how ecosystem services directly contribute to livelihoods, among other functions.²⁰ The economics of ecosystems and biodiversity (known as TEEB) study done by UNEP reinforces this view that ecosystem services are critically important not only to resident communities but to broader national economies.²¹ Therefore, programmes and projects that aim to restore and enhance natural capital will have direct impacts on livelihoods and poverty.
- 67. Beyond delivering direct economic benefits to resident communities (e.g., non-timber forest products and land productivity), being labour-intensive, sustainable land management and forest conservation and regeneration also have the potential to deliver income benefits for the poor. This has been the case with India's ambitious national programme of natural asset restoration under the National Rural Employment Guarantee Act. Still, an evaluation of the Act suggests that the implementation challenges are not different from those facing other local development projects, including limited local participation, administrative complexity and misaligned incentives across stakeholders, all potentially limiting long-term asset-building.²² Thus, the outcomes of such programmes will critically depend on the design and implementation details as well as on the surrounding institutions.
- 68. Beyond specific natural asset restoration programmes, improving the conditions of natural assets in the long run will require locally adapted rules for the management of the commons. The importance of national and local institutions and contexts for such management is now well recognized and evidenced by the opposite fates of similar shellfish fisheries in neighbouring Pacific islands.
- 69. Agriculture will be a key sector for poverty alleviation and for the transition to sustainable societies. Major efforts are needed to develop the sustainable agricultural and forestry production systems that provide decent incomes and livelihoods and at the same time reduce emissions, consume less water and maintain soil fertility and biodiversity.

²⁰ Millennium Ecosystem Assessment, 2005.

²¹ TEEB, The Economics of Ecosystems and Biodiversity: Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB, 2010.

²² Centre for Science and Environment, "The National Rural Employment Guarantee Act (NREGA): opportunities and challenges", New Delhi, 2008.

- 70. Sustainable agriculture has proven in many contexts to be more job-intensive than conventional agriculture. It often requires less capital and less reliance on debt and credit; as a result, it can generate more disposable income for farmers. Sustainable agriculture also has the potential to make small-scale farmers more resilient to weather shocks such as drought.²³
- 71. Agricultural subsidies, as a particular form of price distortion, have long been a contentious issue in international forums, as the local agricultural production in developing countries can be put at a competitive disadvantage vis-à-vis subsidized agriculture in developed countries. Given the importance of agriculture as an employer and as the basis for rural economies in many developing economies, achieving progress on this front could provide a major opportunity for poverty alleviation in rural areas.

Track 6 Getting prices right

- 72. Better accounting of the externalities present in the economic system can lead to more environmentally friendly outcomes.²⁴ To the extent that poor populations often rely on the services provided by natural assets that are unaccounted for in national accounts or in cost-benefit analysis, better accounting and better assessment rules for projects would directly benefit them. One example is mangroves, whose benefits in terms of flood damage control, fishery nursery grounds and other services can often surpass in value the returns generated by their clearance to accommodate other economic activities.²⁵
- 73. Systems of payments for ecosystem services, associated with the maintenance or upgrading of natural assets, are increasingly being developed across the world. Such systems have the potential to impact poverty and livelihoods directly, insofar as they constitute an income transfer from richer groups (e.g., taxpayers or urban residents) to lower-income groups. The literature shows that the results of such schemes in terms of poverty alleviation and improvement of livelihoods critically depend on design issues as well as on local conditions. Recognition of poor communities' stewardship and associated claims on valuable natural assets is critical. Testing the potential of payment for ecosystem services within rural poverty reduction programmes has become an interest of a number of countries.
- 74. Policies designed to "get prices right" or create markets for ecosystem services have raised concerns that they could lead to the disenfranchisement of poor communities whose livelihoods depend on the natural resource base. In agriculture, forestry and mining, examples from across the globe can be found where no adequate compensation was provided to local residents for the loss of land or environmental benefits or for environmental damages created by projects.²⁶

²³ United Nations, Department of Economic and Social Affairs, Sustainable Development Innovation Brief, No. 9 (May 2009).

²⁴ See the Department of Economic and Social Affairs Statistics Division's work on the System of Environmental-Economic Accounting.

²⁵ Forests are another example of a sector where benefits accruing to some stakeholders have often not been factored into decision-making.

²⁶ In the case of land purchases by foreign investors, see World Bank, "Rising global interest in farmland: can it yield sustainable and equitable benefits?", 2010.

75. While such outcomes do indeed make the case for better accounting of environmental costs and benefits in decision-making, there needs to be both the willingness and the capacity to apply such accounting on behalf of all citizens, including minimal standards for transparency and legal systems that give a voice to the most vulnerable.

Track 7 Eco-tax reform

- 76. As a consequence of the variety of designs, the effects of environmental tax reforms have been variable. A review conducted in 2005 based on 61 studies covering several countries highlighted a pattern of effects that suggested that the environmental tax reforms do not significantly dampen GDP growth, have positive but small impacts on employment, and have very beneficial impacts in terms of pollution reduction.²⁷ Apart from employment effects, environmental taxes have other distributional effects which need to be evaluated. These include the direct incidence of a tax as well as indirect effects on goods and services through input-output linkages and potential mitigating effects through revenue recycling.²⁸ Unlike other environmental policy instruments, eco-taxes provide the financial means for Governments to compensate the poor if the tax itself is regressive. Also, there is a distributional dimension to the health and environmental effects of the eco-tax that needs to be considered. If poor individuals and communities are most affected by the pollution which the tax reduces, this effect should be progressive.
- 77. In summary, the following recommendations on the poverty and social dimensions of a green economy could be considered by the Preparatory Committee:
- (a) Support independent research on the potential social impacts of green economy packages for different groups of countries;
- (b) Continue to give high priority to policies that directly aim at poverty reduction, such as investments in education and access to basic services such as water, sanitation and energy;
- (c) Prioritize green economy policies that have the potential to deliver social benefits:
- (d) Target support to small and medium enterprises, including through packages covering clean technology transfer and adoption, new skills development, finance and support to greening supply chains;
- (e) Promote investment in enhancing the natural assets on which poor communities depend for their livelihoods;
- (f) Put in place social safety nets that support incomes and limit the impacts of unemployment on long-term outcomes such as access to education;

²⁷ Roberto Patuelli, Peter Nijkamp and Eric Pels, "Environmental tax reform and the double dividend: a meta-analytical performance assessment", *Ecological Economics*, vol. 55, No. 4 (December 2005).

²⁸ N. Johnstone and J. Alavalapati, "The distributional effects of environmental tax reform", International Institute for Environment and Development Environmental Economics Programme, Discussion Paper DP 98-01.

(g) Ensure that national institutions are designed to take into account and fairly represent the interests of poor and disenfranchised communities, especially in the context of natural resource management.

D. Contribution of the green economy to environmental objectives and challenges ahead

78. Green economy measures by design aim to reconcile environmental and economic goals. The present section asks how far such measures succeed in attaining their environmental objectives and what complications may arise along the way. UNEP enumerates a number of green economy "success stories", including renewable energy in China and solar energy in Tunisia, organic agriculture in Uganda, sustainable urban planning in Brazil, forest management in Nepal and ecosystem services in Ecuador. These range from national policies and programmes to local innovations and pilot projects. ²⁹ Many developing and developed/transition countries have low-carbon development strategies. ³⁰ Only a few have formulated "green economy" strategies, but the Republic of Korea has a national green growth strategy. Some 49 countries across the globe have feed-in tariffs for renewable energy in place as of 2010, about 40 per cent of those being developing countries. ³¹

Overestimating costs, underestimating benefits

- 79. Experience with both domestic and international environmental policies suggests that economic costs are often overestimated ex ante. After the fact, they prove to be smaller in some cases far smaller. This was the case, for example, with the Montreal Protocol on Substances that Deplete the Ozone Layer. A study of European Union environmental legislation finds that frequently the ex ante cost estimates are twice as large as the ex post ones. ³² Several factors explain this result, but failure to predict accurately business response to new regulations, including through technical innovation, is an important one.
- 80. Policies may also yield important co-benefits, that is, when a single instrument achieves multiple objectives. These are not systematically considered in many cost-benefit analyses. For example, measures to reduce local air pollution may also reduce greenhouse gas emissions, or vice versa. The adoption of sustainable agricultural practices can yield economic benefits for poor farmers while also yielding carbon storage benefits for the entire globe. Reducing deforestation and forest degradation can deliver significant co-benefits, including maintained ecosystems services, water conservation and preservation of biodiversity, and benefits to communities and indigenous peoples if it results in the clarification of land tenure and the provision of jobs.³³

²⁹ UNEP, Green Economy: Developing Country Success Stories, 2010.

³⁰ Project Catalyst brief, "Low-carbon growth plans", December 2009.

³¹ Renewable Energy Policy Network for the 21st Century (REN 21), Renewables 2010: Global Status Report, Paris, REN 21 secretariat, 2010.

³² F. Oosterhuis, editor, "Ex-post estimates of costs to business of EU environmental legislation", final report, April 2006.

³³ United Kingdom Department for International Development/Ecofys, "Co-benefits of private investment in climate change mitigation and adaptation in developing countries", final report, 3 November 2010.

- 81. On the other hand, consideration of the environmental effectiveness of green economy policies and measures confronts dilemmas, paradoxes, unintended consequences and adding-up issues.
- 82. Green economy policies aim to reconcile environmental objectives with strong economic performance. To the extent that environmental improvements come at a cost, one risk is that policies will be weakened to mitigate those costs. This has been the case with many eco-tax measures, where tax rates are set too low to have a noticeable deterrent effect on polluters or where generous tax exemptions are granted to pollution-intensive industries. The eco-tax meta-analysis cited above tells a more encouraging story, but nevertheless environmental taxes have declined as a share of total tax revenues in 16 countries of the European Union since 1995.

Rebound effects

83. A classic paradox of green economy measures is the rebound effect, as when energy conservation measures lower energy prices or simply save consumers money, leading to behavioural responses that partially negate the energy savings. Studies focusing on the direct rebound effect of energy efficiency measures on household and private transport energy demand suggest the effect is neither negligible nor huge — usually less than 30 per cent of the initial reduction in energy use.³⁴ Even when indirect effects through increased real income are added,³⁵ energy efficiency policies are found to be effective in reducing energy consumption. Still, to achieve a given energy saving target, policymakers may need to overshoot.

Interdependence of consumption and production

- 84. Globalization has led to rapid structural change in the global economy. Manufacturing is less and less concentrated in developed countries, with a rapidly growing proportion done in developing economies. The same is true of mining and mineral processing and of other heavy industries. Rapidly expanding trade flows have linked consumption in one part of the globe to production in another.
- 85. The fact that a few developed countries have been able to "decouple" their economies from some pollution and waste streams is in part attributable to the transfer of such activities to new locations. This can create local pollution problems for those countries that are the new hosts to these industries. It can create a global problem if, in the process, levels of global pollutants such as greenhouse gas emissions rise owing to less efficient methods of production in the new locations. This may or may not happen: new investments in developing countries may use cleaner, state-of-the-art technologies but these are usually more costly.
- 86. The global interconnectedness of consumption and production across national boundaries reinforces a sense of shared responsibility for addressing global problems. For example, living standards of consumers in high-income countries are being sustained in part by production processes that are no longer located in their home countries but that are nonetheless emitting greenhouse gases.

³⁴ Steve Sorrell, John Dimitropoulos, Matt Sommerville, "Empirical estimates of the direct rebound effect: A review", *Energy Policy*, vol. 37, No. 4 (2009).

³⁵ Terry Barker, Paul Ekins, Tim Foxon, "The macro-economic rebound effect and the UK economy", *Energy Policy*, vol. 35, No. 10 (October 2007).

Adding-up problems

87. Adding-up (or the lack thereof) can be a problem when evaluating the environmental effectiveness of green economy measures. That is, the policies adopted may provide incentives to incremental improvements in the environmental performance of firms or households, when what is needed are more radical improvements. In short, the individual policy measures adopted do not add up to a combined effort of sufficient magnitude. This has become apparent, for example, with the voluntary pledges made by the parties to the United Nations Framework Convention on Climate Change in the context of the Copenhagen Accord. The combined emission reductions by 2020 fall short of what is considered necessary to have a better than even chance of keeping global mean temperature rise below 2°C.³⁶ The UNEP Green Economy Report's modelling work also points to an adding-up problem in the sense that measures modelled do not always result in outcomes consistent with tackling specific environmental problems.

Unintended consequences

88. The case of biofuels illustrates the potential for trade-offs among policy objectives. In this case, the rapid policy-induced growth in demand for corn-based ethanol has had a direct impact on the corn price, creating greater food insecurity in a number of developing countries. Concerns also exist regarding the impact that biofuels targets, for example, in Europe, could have on the demand for palm oil as source of biodiesel, with resultant pressures on tropical forests. In consequence, in mid-2010, the European Union proposed a set of sustainable biofuels guidelines, which has in turn generated opposition on the grounds of green protectionism. The question of what constitutes sustainable biofuels remains a vexed one.

Taking it to scale

89. In summary, one of the biggest challenges ahead for green economy initiatives will be to move from small-scale demonstration projects to policies and programmes with broad benefits at the national and international levels. In devising plans for the wider-scale adoption of green economy measures, care will need to be taken to avoid unintended negative consequences. Wherever possible, efforts should be made to design green economy policies with significant co-benefits, whether economic, social or environmental.

III. Institutional framework for sustainable development

90. The report of the Secretary-General to the first preparatory session (A/CONF.216/PC/2) provided an overview of developments and issues pertaining to the institutional framework for sustainable development. In relation to the Commission on Sustainable Development, the report reviewed steps taken since the World Summit on Sustainable Development to strengthen the Commission, such as the multi-year programme of work. It also took note of various innovations in the work of the Commission, such as an enhanced role for regional institutions, the role of partnerships, the engagement of major groups in the sessions of the Commission,

³⁶ World Resources Institute, Comparability of Annex 1 emission reduction pledges, Working Paper, February 2010.

and the heightened emphasis on implementation of Commission decisions. The report also addressed the issue of the integrative role of the Commission, the apex role of the General Assembly and the contribution of the Economic and Social Council. Since the issuance of that report, Member States, United Nations entities and major groups have submitted responses to a questionnaire pertaining to the objective and themes of the United Nations Conference on Sustainable Development. These are summarized in a synthesis report, which complements the discussion of institutional issues in the present report.

A. Approaches to strengthening the institutional framework for sustainable development

91. The institutional framework for sustainable development covers a spectrum of formal and less formal bodies, organizations, networks and arrangements that are involved in policymaking or implementation activities. The institutional framework must be considered at the local, national, regional and international levels. Globally, the institutional framework has witnessed a dramatic growth in the number of institutions and agreements, with more than 500 multilateral environmental agreements currently in existence. Thus the reach of sustainable development governance has greatly expanded. Yet the continuing deterioration in the natural resource base, threats to ecosystems, global climate change and persistent poverty call into question whether the grasp of the institutional framework matches its reach. The international institutional landscape has been characterized as fragmented, with a silo-like arrangement of regimes and institutions and a related lack of coherence and coordination.

92. A comprehensive overview of the institutional framework for sustainable development would be incomplete without accounting for the growth in informal arrangements, voluntary agreements, networks and civil society arrangements, in many instances established by non-State actors.³⁷ In many countries there is a long tradition of environmental organizations, and at the international level the International Union for Conservation of Nature has long been an important actor. The United Nations Global Compact has emerged as a formal link for the United Nations system to engage with the private sector, based on the commitment to eight core principles. There has been considerable innovation in the development of standards and codes by non-governmental actors, with varying degrees of involvement by Governments and international institutions. A range of voluntary initiatives seeks to broaden the adoption of key principles, for example, the Equator Principles on financing, the Global Reporting Initiative, which aims to lift the bar for corporate reporting on sustainability, and the International Organization for Standardization process, most recently addressing corporate social responsibility. What these arrangements have in common is that they aim to advance sustainable development but largely outside the governmental context.

³⁷ See Introduction, Neil Adger and Andrew Jordan, editors, Governing Sustainability, Cambridge, Cambridge University Press, 2009; Megali Delmas and Oran Young, editors, Governance for the Environment, Cambridge, Cambridge University Press, 2009; World Economics Forum, Global Redesign: Strengthening International Cooperation in a More Independent World, Geneva, 2010.

93. Overall, there is a widely recognized need to strengthen the institutional framework for sustainable development at all levels. In particular, the aim is integration in policymaking and implementation of the three pillars of sustainable development. A strengthened institutional framework for sustainable development, building on developments since the United Nations Conference on Environment and Development and the World Summit on Sustainable Development, encompasses a number of objectives.

Ensuring coherence and policy integration in the economic, social and environmental fields

- 94. Sustainable development is predicated on integrated policymaking and implementation. At the national level, one response to the integration challenge has been to create new institutions, for example, national councils, in many cases with disappointing results. An arguably more effective alternative has been to integrate economic, environmental and social goals within the mandate of existing institutions. Longer-term budgeting and sound regulatory instruments can be important tools for integration.
- 95. At one level, integration can refer to inclusion of the dimensions of sustainable development in the formulation of legal frameworks, the definition of property rights and the organization of government. For instance, the South African National Environmental Management Act of 1998, a piece of framework legislation, establishes sustainable development as one of the principles that applies to all actions of all organs of State that may significantly affect the environment, thus serving as a guide for policy formulation and implementation.
- 96. At another level, integration refers to the process of day-to-day implementation, that is, how policies, management decisions, instruments and interventions are deployed. Integrated implementation is facilitated by factors such as: the presence of the requisite capacity in government and civil society; compatible objectives; the existence of supportive legal and institutional frameworks; and easy access to data and information for decision-making. At the national level, horizontal integration across sectoral institutions and between different levels of government assumes great importance.

Improving analysis, assessment and scientific advice

97. Decision makers and citizens need access to sound sources of information, assessment and advice concerning risks to natural systems and human well-being. A variety of assessments at the international level have been undertaken over the past few decades, but their bearing on policymaking has varied widely. The cases of effective linkage between science and policy could offer fruitful lessons for future assessments, including that planned on biodiversity.

Strengthening implementation, monitoring and accountability

98. There is a need to reinforce the institutions and processes involved in delivering on normative commitments made at the global level. Presently, there is an apparent disconnect between the bodies making normative decisions and the bodies responsible for implementation, with the latter feeling only weak ownership of those decisions unless they are incorporated into mandates from their own governing bodies.

Limiting overlap or duplication of activities

99. There are a number of mechanisms for coordination within the United Nations system, such as the Chief Executives Board and the Environment Management Group, in relation to the environment. Several thematic inter-agency mechanisms have been established, including UN-Energy, UN-Oceans and UN-Water, with the objective of fostering cooperation and information-sharing among United Nations entities. UN-Water also contributes to monitoring and reporting on internationally agreed water and sanitation targets. The United Nations Development Group assumes a role in relation to development activities on the ground, operationalizing normative decisions through, for example, producing guidance notes for United Nations country teams, including a recent one on mainstreaming environmental sustainability in country analysis and the United Nations Development Assistance Framework.

Enhancing participation

100. Effective participation aids the integration of the three pillars in policy formulation and implementation. Policy formulation and implementation are more than a wise allocation of resources and good stewardship; the process matters. Ignoring social marginalization, vulnerability and the uneven distribution of resources frays the trust needed for collective action. Giving greater voice to the poor and marginalized groups in decision-making is thus a high priority. Providing better access by the poor to information — for example, on the environment, on the use of revenues allocated for local economic development — can be a valuable means of empowerment.³⁸ More can be done to build on progress made to promote transparency and accountability through access to information and stakeholder involvement in decision-making.

Strengthening national and local capacities for sustainable development

101. Ultimately the success or failure of sustainable development rests on implementation at the national and local levels. Such implementation could benefit from enhanced capacity-building efforts, particularly in the least developed countries, for analysis, establishment and enforcement of regulatory and incentive frameworks to shift towards sustainable consumption and production patterns.

102. At the national level, considerable progress has been achieved in strengthening institutional mechanisms dealing with policy formulation, coordination, implementation and review. Many countries have put in place national sustainable development strategies and related instruments, but these are seldom the most important reference documents for economics ministries and donors. A central challenge is to ensure that such strategies have an impact on policymaking and implementation. Various mechanisms can be used to monitor the progress and implementation of national sustainable development strategies, including internal reviews, external auditing, parliamentary and budgetary reviews and indicator-based monitoring. France initiated a peer review of its national sustainable development strategy, and the Netherlands and Norway also carried out similar reviews.

³⁸ Work of civil society groups and at least one State government in India to conduct "social audits" is a valuable advance. See also the work of the World Resources Institute Access Initiative on access to environmental information.

103. Also at the national level, there have been efforts to overcome fragmented and narrowly sectoral approaches through processes that integrate different sectors and different levels of government (local and national), and enable greater participation by stakeholders. In that regard, many countries have prepared integrated water resources management plans, which aim to ensure the sustainable development of water resources and address conflicting demands.³⁹ At the regional level, the European Union Water Framework Directive provides common principles, approaches and requirements for water management and requires that European Union members establish river basin management plans for the protection and restorations of water resources. Integrated coastal zone management also explicitly aims for a cross-sectoral approach and the integration of different levels of government. In New Zealand, national legislation mandates the preparation of a national framework for coastal planning to which subsequent planning relating to the coastal zone must adhere.

104. Local governments are at the coalface of emerging challenges, such as the need to prioritize and strengthen the capacity to deliver basic services in the face of rapid, often unplanned urbanization in developing countries. In many developing countries, improved integration, coordination and resource-sharing between levels of government would improve access to basic services such as water, sanitation, health and housing. Also, engagement of civil society has proven to be a valuable means of implementation at the local level, especially but not only where the local authorities' capacities and resources are limited.

B. The broader framework

105. The General Assembly serves as the apex body for legislative outcomes on sustainable development. It also provides the forum for integrated consideration of issues related to the oceans, for example, through the regular process for global reporting and assessment of the state of the marine environment, including socioeconomic aspects, as recommended in the Johannesburg Plan of Implementation. The Economic and Social Council has the overall mandate to integrate the three pillars of sustainable development. The Council, through its annual ministerial review and linkages to the international financial institutions, has strengthened its integrative role (see A/61/583).

106. The Commission on Sustainable Development was established as the high-level body for the review and follow-up to the implementation of Agenda 21. While the central role of the Commission is widely acknowledged, concern has been expressed about lack of implementation of its policy decisions and its perceived weakness in driving the sustainable development agenda. However, the Commission has been a leading institution in the United Nations system with respect to the involvement of the major groups which engage actively and substantively in its work programme.

107. In order to improve the follow-up and implementation of Agenda 21, the Johannesburg Plan of Implementation and the decisions of the Commission on Sustainable Development, establishing a voluntary peer review mechanism, building

³⁹ UN-Water, "Status report on integrated water resources management and water efficiency plans", 2008.

on peer review of national sustainable development strategies and drawing on experience in OECD and with the African Peer Review Mechanism of the New Partnership for Africa's Development, could be considered.

C. Governance of the environmental pillar

108. The institutions for the environment are frequently described as the weakest of the three pillars. While the adoption of a large number of multilateral environmental agreements has resulted in broad coverage, it has arguably also spread thin the limited financial and human resources and resulted in inadequate coordination. In response, efforts are also focused on bringing about greater coordination between multilateral environmental agreements through joint administrative support and thematic clustering. At present, UNEP provides administrative support for the following conventions: the Convention on International Trade in Endangered Species (CITES), the Convention on Biological Diversity, the Convention on Migratory Species, the Basel Convention, the Rotterdam Convention and the Stockholm Convention (jointly with the Food and Agriculture Organization of the United Nations (FAO)), as well as the Montreal Protocol. Clustering of thematically related multilateral environmental agreements has been identified as a bottom-up solution for enhancing coherence. In that regard, a step towards greater synergy was the simultaneous extraordinary Conferences of the Parties to the Stockholm, Rotterdam and Basel Conventions, held from 22 to 24 February 2010, which adopted a decision on joint services, joint activities, synchronization of the budget cycles, joint managerial functions and review arrangements. The biodiversityrelated agreements (Convention on Biological Diversity, CITES, Convention on Migratory Species) have also moved towards greater cooperation. In general, thematic cooperation, animated by a shared need to investigate an issue, appears to be more important than factors such as the co-location of secretariats. It is important to define the rationale and purpose of multilateral environmental agreements' cooperation and set clear objectives and criteria to assess results. At the same time, initiatives for coordination must also be balanced against the need to respect the autonomy and legal mandates of the agreements.

109. The strengthening of delivery channels of funding for sustainable development is critical for implementation. In that regard, the question of governance, in particular the relative influence over decision-making of donor and recipient countries, has been a key issue for debate. Currently the Global Environment Facility (GEF) serves as an operating entity of the financial mechanism for the United Nations Framework Convention on Climate Change, as well as the Convention on Biological Diversity, the Stockholm Convention and the United Nations Convention to Combat Desertification. Under its International Waters focal area, GEF finances activities to help countries collectively manage their transboundary surface water basins, groundwater basins, and coastal and marine systems. GEF successfully leverages considerable co-financing, yet questions remain whether the available funds are adequate to cover the expanding needs of countries.

110. The international response to climate change has resulted in the creation of a number of funds, some under the aegis of the Framework Convention and Kyoto Protocol and others located in the World Bank. In that regard, the Adaptation Fund, which is mandated to finance concrete adaptation projects and programmes in developing countries that are parties to the Kyoto Protocol, marks a break with

prevailing practice in that developing countries have a majority on the Adaptation Fund Board. Another novel feature of the Fund's operations is direct access, whereby the recipient country can access financial resources without going through an intermediary multilateral institution, as is the case for funding allocated under GEF. For its part, the World Bank in 2008 established the Climate Investment Funds, which include balanced representation from donor and beneficiary countries, but are not formally linked with the Framework Convention. Most recently, the Green Climate Fund, established at the sixteenth session of the Conference of the Parties to the Framework Convention, will be governed by a board of 24 members comprising equal representation from developed and developing countries.

111. A number of initiatives have explored options for strengthening international environmental governance, with a focus on UNEP. The consultative process launched by the UNEP Governing Council identified a number of system-wide responses to the shortcomings in the current system of international environmental governance and also considered a number of institutional options for strengthening the environment pillar in the context of sustainable development.⁴⁰

Institutional options

Enhancing UNEP. Universal membership in the UNEP Governing Council universal (from current 58 members). No change to mandate and minimal financial implications. Some analysts conclude that broad and active participation in the Governing Council and the Global Ministerial Environmental Forum of observer countries amounts to de facto universal membership.

Establishing a new umbrella organization for sustainable development. New institution exercising executive functions, possibly founded on existing intergovernmental and secretariat entities. It would enhance integration of sustainable development in the work of institutions covering economic, social and environmental pillars. Established by General Assembly resolution or legal instrument.

Establishing a specialized agency such as a world environment organization. Specialized agency based on the model of United Nations agencies such as the World Health Organization (WHO) and FAO, which are hybrid normative and operational entities. It would be the global authority on the environment, providing policy guidance to other United Nations entities working on the environment and multilateral environmental agreements.

Reforming the Economic and Social Council and the Commission on Sustainable Development. In relation to the Economic and Social Council, possibilities that have been raised include strengthening the coordination of role of the Council in relation to sustainable development, for example, by establishing a "sustainable development segment" to engage more closely with the reports of the various functional commissions and entities such as UNEP. Another possibility involves merging the Economic and Social Council with the Commission

⁴⁰ See UNEP Governing Council decision SS.XI/1; see also the Nairobi-Helsinki Outcome, second meeting of the Consultative Group of Ministers or High-level Representatives on International Environmental Governance, Helsinki, 21-23 November 2010.

on Sustainable Development into a council on sustainable development. Mention has also been made of upgrading the Commission to a sustainable development council, which could be achieved through a General Assembly resolution.

Enhancing institutional reforms and streamlining existing structures. A consortium arrangement for environmental sustainability, headed by a high-level governing body. An instrument or set of instruments would structure relationship with existing institutions.

D. Governance of the economic and social pillars

- 112. An open multilateral trade regime has been an enabler for sustained economic growth and poverty eradication. Within the World Trade Organization, there is a need to continue promoting a better understanding of the links between trade and environment and between trade and social development.
- 113. The international financial institutions and the multilateral development banks are key institutional actors in relation to sustainable development. Recent reforms, which have increased the representation of developing countries, have enhanced the legitimacy of the governing bodies of the International Monetary Fund and the World Bank. The World Bank and the multilateral development banks have made considerable strides in incorporating sustainable development into their programmes and projects, for example, support for renewable energy and agriculture in the wake of the food crisis. Still, more effort is needed to continue such integration as well as to bridge the gap between those institutions and the rest of the United Nations system.
- 114. The social pillar of sustainable development, which is central to poverty eradication, should be strengthened, including through giving greater consideration to social issues in the work of the United Nations system on sustainable development. There has been considerable innovation, some of it involving the creation of new institutions, for example, the Joint United Nations Programme on HIV/AIDS (UNAIDS) in response to the HIV/AIDS pandemic and, most recently, the establishment of UN-Women, while in other areas partnerships have been forged, for example, the GAVI Alliance, which brings together the United Nations Children's Fund, WHO, the World Bank and the Bill and Melinda Gates Foundation. Under the GAVI Alliance's advance market commitments, which supports the creation of markets for vaccines, donors have committed \$1.5 billion for affordable access to the pneumococcal vaccine, addressing a disease that annually kills 1.6 million persons.
- 115. The following options could be considered in the preparations for the United Nations Conference on Sustainable Development:
- (a) At the international level, strengthen monitoring, coordination and implementation of sustainable development, including enhancing links and collaboration between the policy and operational levels;
- (b) Strengthen institutional mechanisms at the national level, including national sustainable development strategies and forging stronger links to economics

ministries, for integrated policy formulation, coordination, implementation and review;

(c) Develop innovative financing mechanisms and strengthen delivery mechanisms as part of the institutional framework for sustainable development. There is a strong argument that funding mechanisms should be responsive to the relevant multilateral agreements and policy processes.

IV. The way forward

- 116. Looking to the United Nations Conference on Sustainable Development, in 2012, and considering the two themes in relation to the Conference objective, the following messages emerge from the preceding analysis.
- 117. First, a green economy in the context of sustainable development and poverty eradication is an approach to economic decision-making that will need to be built from the bottom up, responding to national and local priorities and challenges.
- 118. Secondly, and following from the first point, green economy in the context of sustainable development and poverty eradication is broader than simply low-carbon growth. The social dimension and poverty eradication remain paramount for most developing countries.
- 119. Thirdly, both developed and developing countries are already experimenting with green growth strategies, including low-carbon growth strategies, though their efforts do not yet add up to a level of ambition equal to the global challenges. A growing number of Governments see such strategies as essential to the long-term dynamism of their economies.
- 120. Fourthly, countries are nevertheless concerned about the near-term transition costs from the loss of competitiveness, worsening terms of trade, economic dislocations and unemployment. Targeted domestic measures such as worker retraining, backed by international support such as aid for trade, can assist with minimizing transition costs.
- 121. Fifthly, and more generally, strengthened international cooperation will be crucial to addressing ongoing and emerging sustainable development challenges in an ever more interdependent world.
- 122. Sixthly, international institutions, including the United Nations system, should support countries that choose to strengthen national green economy efforts and help them to align those efforts with poverty eradication and other national priorities. This will include knowledge-sharing on effective policy and institutional design, institutional capacity-building, technology-sharing and innovative financing for a green economy transition.
- 123. Seventhly, insufficient progress has been made in integrating sustainable development into policymaking and implementation at all levels. Member States should have an active role in providing political guidance to the United Nations system for overcoming the institutional fragmentation and lack of integration of the three pillars of sustainable development.