



Consejo Económico y Social

Distr.
GENERAL

E/CN.17/1997/18
24 de febrero de 1997
ESPAÑOL
ORIGINAL: INGLÉS

COMISIÓN SOBRE EL DESARROLLO SOSTENIBLE
Quinto período de sesiones
7 a 25 de abril
Tema 4 del programa provisional*

PREPARATIVOS PARA EL PERÍODO EXTRAORDINARIO DE SESIONES DE LA
ASAMBLEA GENERAL PARA REALIZAR UN EXAMEN Y UNA EVALUACIÓN
GENERALES DE LA EJECUCIÓN DEL PROGRAMA 21

Nota verbal de fecha 18 de febrero de 1997 dirigida al Secretario
General por el Representante Permanente de los Países Bajos
ante las Naciones Unidas

El Representante Permanente del Reino de los Países Bajos ante las Naciones Unidas tiene el honor de adjuntar el resumen preparado por el Presidente de la Cuarta Reunión de expertos sobre la financiación del Programa 21**, que se celebró en la sede la Comisión Económica para América Latina y el Caribe (CEPAL), en Santiago (Chile), del 8 al 10 de enero de 1997. La reunión fue organizada conjuntamente por el Gobierno de Chile y el Gobierno de los Países Bajos, en cooperación con la CEPAL, el Banco Interamericano de Desarrollo y el Departamento de Coordinación de Políticas y Desarrollo Sostenible de la Secretaría de las Naciones Unidas.

Ésta era la cuarta de una serie de reuniones de expertos celebradas en Kuala Lumpur, del 2 al 4 de febrero de 1994, Glen Cove, Nueva York (Estados Unidos de América), del 15 al 17 de febrero de 1995, y Manila, del 6 al 8 de febrero de 1996. El objetivo de la reunión era examinar los mecanismos de financiación para la aplicación del Programa 21 y formular recomendaciones de acción para presentarlas al Grupo de Trabajo especial entre períodos de sesiones de la Comisión sobre el Desarrollo Sostenible, que se ha de reunir del 24 de

* Se publicará como documento E/CN.17/1997/1.

** El informe se distribuye únicamente en el idioma en que se ha presentado.



febrero al 7 de marzo de 1997, y a la propia Comisión, en su quinto período ordinario de sesiones, que se celebrará del 7 al 25 de abril de 1997.

Mucho le agradecería que tuviera a bien hacer distribuir el resumen adjunto como documento oficial de la Comisión sobre el Desarrollo Sostenible en su quinto período de sesiones, en relación con un tema pertinente del programa.

FOURTH EXPERT GROUP MEETING ON FINANCIAL ISSUES OF AGENDA 21
FINANCE FOR SUSTAINABLE DEVELOPMENT: THE ROAD AHEAD

Santiago, Chile • 8-10 January 1997

Organized by:

United Nations Department for Policy Coordination and Sustainable Development (UN/DPCSD), United Nations Economic Commission for Latin America and the Caribbean (UN/ECLAC), and Inter-American Development Bank (IDB).

Sponsored by Governments of The Netherlands and Chile.

CHAIRMAN'S SUMMARY

Tan Sri Dato Dr. Lin See-Yan
Executive Chairman, Pacific Bank, Malaysia

OVERVIEW

1. The Fourth Expert Group Meeting on Financial Issues of Agenda 21, sponsored by the Governments of The Netherlands and Chile and organized by United Nations Department for Policy Coordination and Sustainable Development (UN/DPCSD), United Nations Economic Commission for Latin America and the Caribbean (UN/ECLAC), and the Inter-American Development Bank (IDB), was held at UN/ECLAC Headquarters in Santiago, Chile, on January 8-10, 1996. The goals of the Meeting were: (i) to assess progress in the mobilization of financial resources for sustainable development since the 1992 United Nations Conference on Environment and Development, held in Rio de Janeiro, Brazil; (ii) to provide a state-of-the-art review and analysis of unresolved issues related to traditional and innovative international and domestic financial mechanisms; and (iii) in these and other ways, to generate information and recommendations that will assist the United Nations Commission on Sustainable Development (CSD) in preparing for the 1997 Special Session of the United Nations General Assembly. The Special Session aims at revitalizing and energizing the global commitment to sustainable development and defining priorities for the post-1997 period.

2. More than 70 international experts in finance and sustainable development from international organizations, governments, nongovernmental organizations (NGOs), universities, and the private sector attended the Meeting. They came from both developing and developed countries and participated in their personal capacities, not as official representatives of their organizations. As on previous occasions, Dr. Lin See-Yan of Malaysia, the chairman of the CSD Ad Hoc Inter-sessional Working Group on Finance, chaired the sessions. The agenda of the Meeting and the list of participants can be found in annexes I and II to this Summary.

3. The experts took note of the conclusions and recommendations of reports from previous meetings and confirmed the continuing relevance of those conclusions and recommendations in ongoing discussions about financing sustainable development. They reaffirmed the notion that

sustainable development has economic, social, and environmental dimensions; it is not simply a matter of environmental protection. Tradeoffs among objectives related to the different dimensions are inevitable.

4. Addressing such tradeoffs remains a national matter, best served by decision-making processes that involve all relevant stakeholders. The creation of sustainable development strategies is one way of doing this and thereby ensuring that financial and other resources are directed toward the highest priority national objectives. While recognizing the importance of issues and actions at the national level, the experts emphasized that sustainable development has many global dimensions, which require concerted and coordinated actions by nations and the provision of international financial transfers, especially from developed to developing countries.

5. The experts also reaffirmed that financial resources are essential for sustainable development but are not, on their own, sufficient for achieving it. In the absence of appropriate policies, consumer and producer behaviour will not shift toward more sustainable patterns, and the financing gap will remain unnecessarily large. Implementation of appropriate policies holds the promise of not only mobilizing additional financial resources, but also of reducing the need for such resources by, for example, minimizing the amount of environmental degradation requiring remedial action and minimizing the costs to consumers and producers of complying with environmental regulations (cost-effectiveness). Many of these policies were discussed at the Meeting and are described in this report.

6. This report does not attempt to reflect all the views and suggestions made at the Meeting, nor does it represent a negotiated text. Nevertheless, it does reflect the general thrust of the discussions. It covers discussions related to the following topics:

- (i) Trends in finance for sustainable development since Rio;
- (ii) Developing policies for improved access to external finance;
- (iii) Domestic resource mobilization policies; and
- (iv) Innovative international financial mechanisms.

7. A final section summarizes some broad conclusions for future activities emerging from the Meeting.

I. Trends in finance for sustainable development since Rio

8. Three major trends in finance for sustainable development have occurred since Rio. First, and qualitatively, interest and activity in developing innovative domestic and international financial mechanisms, especially ones based on policy reforms, have risen. For example, a number of countries have reduced environmentally damaging subsidies and begun experimenting with environmental charges, user fees, and emissions-trading programmes. As discussed below, such mechanisms have the potential to generate a substantial portion of the domestic resources called for by Agenda 21. In the international arena, private companies and governments in several countries have initiated pilot joint implementation activities and signed biodiversity

prospecting agreements. Given that developing countries possess low-cost opportunities to sequester carbon and are rich in biodiversity, such international mechanisms could potentially transfer substantial financial resources, as well as technology, from developed to developing countries.

9. Second, and quantitatively, both official development assistance (ODA) and domestic resource mobilization have fallen far short of the commitments made at Rio. Official development assistance as a percentage of gross national product (GNP) in countries of the Organisation for Economic Co-operation and Development (OECD) as a whole has in fact declined, from 0.34 percent in 1992 to only 0.27 percent in 1995. Funding for the Global Environment Facility (GEF) and the Multilateral Fund of the Montreal Protocol has expanded, but not as greatly as many had hoped. Domestically, many developing countries have increased their investments in the social and environmental sectors, in several cases through the establishment of off-budget environmental funds as well as by more traditional budgetary allocations. These increases have typically been small, however. Assessing trends in domestic resource mobilization for sustainable development is complicated by conceptual problems related to defining and identifying sustainable development expenditures and by the lack of cross-country data on public- and private-sector expenditures disaggregated by social and environmental activities. For this reason, it is impossible to be precise about the amount of the shortfall relative to the \$500 billion annual target given in Agenda 21. Despite the disappointing achievements on ODA and the need to make further progress on domestic resource mobilization, one should not conclude that the impact of Rio has been insignificant. It is likely that achievements would have been less had Rio not occurred.

10. Third, and more positively, private flows of financial resources from developed to developing countries have expanded enormously. Foreign private capital has become the dominant source of capital for many developing countries, especially those in Asia and increasingly those in Latin America. Ten years ago, private flows represented just a third of total capital flows to developing countries. According to World Bank estimates, they now represent more than 80 per cent. In 1996, estimated aggregate net private flows to developing countries totalled more than \$230 billion. Although private flows will fluctuate over time and vary across countries, they should continue growing, due to continued globalization of production, trade liberalization, and financial integration. Developing countries that are currently receiving substantial private flows face the challenge of harnessing those flows to promote sustainable development and not simply short-term, unsustainable economic growth. Developing countries that hope to join this group face the challenge of creating economic and political environments that are attractive to foreign private investors.

II. Developing policies for improved access to external finance

A. Official development assistance

11. Most donor countries that accepted the United Nations' ODA target of 0.7 percent of GNP have not achieved it. There are several reasons for that, most of which are likely to persist in the immediate future. In donor countries, the political commitment to aid is being challenged by chronic budgetary pressures, the end of Cold War rationales for aid, the perception of aid dependence among the poorest countries, a decreasing need for aid among middle-income countries, and skepticism about the historical effectiveness of aid in promoting development and reducing poverty. At the same time, the paradigm shift within development circles from development being equated to growth and led by public-sector planning efforts, toward a more complex, multidimensional concept of development being people-centred, participatory, and market-driven, has led to uncertainty about the most appropriate role of aid. Aid remains an essential ingredient for sustainable development in developing countries, but there is a crisis of confidence in its utility, especially in countries that are heavily aid-dependent.

12. Three strategies can help restore donor support for aid programmes and reverse the decline in ODA relative to donor GNP. These three strategies are consistent with the paradigm shift in development thinking and point, encouragingly, toward a constructive and cooperative approach to aid:

- First, both donors and recipients need to reassert the primacy of the sustainable development goals of aid over short-term commercial and political motivations. This needs to be supported by greater transparency with regard to the objectives of aid programmes and the consistency of actual allocations and end uses with those objectives. Transparent objectives and allocations can help reduce donors' use of tied aid, recipients' use of aid for short-term political and economic gains, and temptations to divert aid to private pockets. Evidence that aid programmes are successfully promoting sustainable development goals, especially in alleviating poverty, provides the best case for renewing and strengthening political support for aid.
- Second, recipients need to maintain progress toward implementing sound economic, social, and environmental policies. The contribution of aid to sustainable development is greatest when it occurs in the context of a stable and open macroeconomic environment with competitive productive sectors and effective policies and programmes to alleviate poverty, provide education and health care, and protect the environmental resource base. Evidence indicates that aid in a good policy environment does work. Donors should be willing to provide concessional support to eligible recipients who have made a credible commitment to creating such a policy environment.
- Third, donors and recipients need to improve aid coordination to reduce the risk of programme duplication and programmes working at cross-purposes. The best mechanism for coordination is a clear, recipient-driven strategy for sustainable development. National and sectoral sustainable development strategies can serve as the basis for designing investment programmes using both domestic and international financial resources. Although they face difficulties in disentangling the interrelated effects of aid flows, systems such as the environmental marker system in the annex to the 1996 report of the OECD Development

Assistance Committee (DAC) will help donors and recipients determine the degree to which aid is indeed contributing to sustainable development.

13. To be fully effective, aid efforts must recognize the changes in international national finance. Wherever appropriate, aid should be used to leverage greater foreign and domestic private investments consistent with sustainable development, especially in poverty alleviation. Aid can play a strong role in catalyzing private investment in countries that are not currently receiving significant private flows. Aid recipients that are already receiving significant private flows need to consider ways to use aid to improve the contribution of private flows to sustainable development.

B. Debt

14. Heavy debt burdens have been a major hindrance to sustainable development in many developing countries. Although the debt situation of middle-income countries has, on the whole, improved significantly, with many of those countries having reentered international capital markets, many heavily indebted poor countries (HIPCs) continue to face heavy external debt burdens, despite a decade of international efforts to address the debt problem. The joint World Bank/IMF HIPC Initiative, which was approved in September 1996, aims at reducing the debt burden of HIPCs to sustainable levels and at exiting those countries from the rescheduling process within six years. It is an innovative approach in that it addresses external debt in a comprehensive way and involves all creditors.

15. Effective and flexible implementation of the Initiative promises to reduce debt as an impediment to sustainable development in participating countries and to enable those countries to focus on the removal of remaining impediments. The Initiative is not, however, a panacea for all the economic, let alone developmental problems facing HIPCs. Although it involves strong programmes of adjustment and reform, countries will need to adopt, implement, and sustain additional reforms to get on and stay on a sustainable development track. It may not eliminate all the underlying conditions that have resulted in unsustainable levels of debt, nor the need for continued flows of concessional finance to eligible countries after their debt burdens have been reduced to more sustainable levels.

C. Foreign private capital flows

16. Foreign private capital flows to developing countries have not only grown rapidly since Rio but shifted from commercial lending toward foreign direct investment (FDI) and portfolio investment. Foreign direct investment is now the largest single source of private flows to developing countries, reaching nearly \$100 billion in 1996 according to World Bank estimates. Portfolio investment was estimated to be nearly half as large. Although FDI remains heavily concentrated in a small number of countries (80 per cent of all FDI goes to twelve countries), the number is growing. Foreign-direct-investment flows between developing countries are also growing.

17. The net impacts of FDI and portfolio investment upon sustainable development are difficult to determine. Relevant data are difficult to come by, and quantitative models relating FDI and portfolio investment to social and environmental impacts are difficult to develop. In most cases, it appears that FDI has strong positive effects on host country economies. It provides risk capital that can contribute to economic growth, employment, and poverty alleviation, and it can also create positive externalities in the form of increased domestic competition and international competitiveness, improved management skills, increased market access, and a broader, deeper and potentially cleaner set of production technologies.

18. Although country experience does not indicate that environmental regulation deters FDI, or that transnational corporations are less environmentally responsible than domestic firms, FDI that is made in the absence of effective environmental policy regimes can, like any type of investment, result in the creation of pollution problems and other forms of environmental degradation. This is a particular risk in countries experiencing large FDI flows that overwhelm the regulatory capacity of environmental authorities. Similar concerns can arise in regard to impacts on social equity.

19. Host country governments can undertake a number of policy actions to raise and improve the contribution of foreign private capital flows to sustainable development. Foreign investors are primarily interested in the overall economic and business environment in host countries. The key determinants of foreign private flows are stable macroeconomic policies, transparent and fair laws and public administration, open trade and investment policies, and adequate infrastructure and human resources. Actions to create an environment with these characteristics will stimulate higher levels of domestic investment as well.

20. To minimize potential negative impacts of foreign investment on sustainable development, host country governments need to strengthen social and environmental policies and programmes, especially in alleviating poverty. Although some foreign investors may act out of enlightened self-interest to minimize the environmental impacts of their activities and to ensure the welfare of their workforces and neighbouring communities, this is no substitute for effective national social and environmental policies and regulations. Home-country governments might consider making risk guarantees for FDI conditional on sound environmental management by investors.

21. In cooperation with national authorities, international organizations should support the development of better information on the likely impacts of foreign private flows upon sustainability. International organizations, such as the World Bank, should also continue their efforts to assist national governments with the development and implementation of "green" accounting methods, which provide essential information on the degree to which public and private investments offset the depletion and degradation of natural resources and enhance human capital.

III. Domestic resource mobilization policies

22. As in previous Meetings, the experts emphasized that the governments of both developed and developing countries have a wide range of options for mobilizing domestic financial resources. These options include, *inter alia*:

(i) actions to raise additional fiscal resources, such as

- reforming present tax systems;
- levying appropriate levels of user charges and fees; and
- imposing environmental taxes;

(ii) actions to mobilize financial resources through public expenditure reforms, such as

- curtailing unproductive expenditures;
- reducing subsidies inconsistent with sustainable development; and
- reducing military expenditures;

and (iii) actions to redirect financial resources through other reforms, such as

- macroeconomic reforms; and
- structural reforms.

23. One study presented at the Meeting estimated that, under conservative assumptions, the actions in categories (i) and (ii) could in the long run generate more than \$1 trillion per year on a global basis, with about a quarter of the total being generated in developing countries. These findings are consistent with rougher estimates presented at previous meetings. The study was unable to quantify the amounts that might be generated by the actions in category (iii), but it suggested that they would be very large, due to static and dynamic efficiency effects that increase the pool of domestic savings.

24. Several of the options listed above, such as reducing subsidies that are inconsistent with sustainable development and expanding the use of user charges and environmental taxes, are attractive because they not only generate financial resources but also shift consumer and producer behaviour toward more sustainable patterns. They achieve the latter objective by causing the prices of goods to reflect more of the social and environmental costs of production and consumption (full-cost pricing). This raises economic efficiency in the broad, social welfare sense and puts market forces in line with sustainable development.

25. The experts emphasized that resource mobilization efforts must be accompanied by actions on the expenditure side to ensure that available funds are used effectively and directed toward the activities that make the greatest contribution to sustainable development, in particular poverty alleviation. In this regard, a key option is the formulation of national sustainable development strategies through the joint effort of government, the business community and civil society.

A. Subsidies

26. Historically, governments in both OECD and non-OECD countries have introduced a wide range of direct and indirect subsidies, including cash transfers, tax exemptions, below-cost pricing of capital and natural resources, and price controls, in an effort to stimulate economic growth and exports, to support particular industries, to maintain or create jobs, and to improve the welfare of the poor. Subsidies are expensive: global estimates of their magnitude range from \$0.5 to 1 trillion per year, most of which occurs in OECD countries (although the ratio of subsidies to GNP is highest in non-OECD countries).

27. With some exceptions, studies have found that subsidies, especially ones on inputs (e.g., energy, water, pesticides and fertilizer), are usually inefficient means of achieving their stated ends. Except in cases of market failure, subsidies tend to distort economic incentives, channelling investments to less-profitable activities and reducing social welfare. They tend to be regressive, working against the poor whom they were intended to benefit, and to promote depletion of natural resources (e.g., water, forests and fisheries) and overuse of polluting inputs (fossil fuels, fertilizers, etc.). In many cases, sectoral subsidies have undermined competitiveness by distorting resource allocation in the economy as a whole and by promoting the unsustainable use of natural resources.

28. Once created, many subsidies are politically difficult to remove, because their benefits are usually concentrated on well-defined groups while their costs are widely diffused among producers in non-subsidized sectors and consumers. Nevertheless, budgetary pressures, economic crises, and efficiency considerations have led many countries to begin reducing subsidies. China and Russia have made significant progress in reducing energy subsidies, and a number of Asian and Latin American countries have reduced agricultural subsidies and raised fees on the use of natural resources. Several developed countries (e.g., New Zealand, the Netherlands, and the United States) have also reduced agricultural subsidies, at least relative to gross domestic product (GDP) (and in some cases in absolute terms), through both unilateral domestic actions and multilateral trade negotiations. Despite this progress, the scope for additional action by developed and developing countries to reduce subsidies remains large.

29. These considerations suggest that governments should:

- minimize the creation of new subsidies;
- consider modifying budgetary procedures and reports to make the magnitude of subsidies, including indirect ones such as tax exemptions and below-cost natural resource charges, more transparent;
- increase understanding and awareness of the impacts of existing subsidies by sponsoring and disseminating the results of studies that measure their economic, social, and environmental costs and benefits and identify those who bear their costs and those who reap their benefits;

- take a comprehensive approach to the reduction of subsidies inconsistent with sustainable development by coordinating subsidy reductions with the privatization of state-owned enterprises, market liberalization, and the implementation of environmental and social policies to offset potential negative spillover effects (e.g., improved forestry policies may be necessary to prevent reductions in kerosene subsidies from causing increased deforestation); and
- consider initiating international consultations at the appropriate level (e.g., regional or subregional; not necessarily global) to determine whether coordinated subsidy reductions across countries are needed to minimize perceived impacts of such reductions on international competitiveness.

30. These measures should contribute toward creating the political will necessary to overcome the vested interests that typically block subsidy reform efforts.

B. Economic instruments for environmental management

31. Economists have long advocated the use of economic instruments, which include charges on pollution and polluting inputs, tradable emission permits, and deposit-refund schemes. In theory, these instruments can achieve environmental quality goals at a lower cost than traditional command and control regulations, which typically apply uniform environmental standards across polluters and mandate the use of costly technology. Various empirical studies have estimated that greater application of economic instruments might enable developing countries to reduce the costs of achieving some pollution control objectives substantially, in some cases by as much as 60-90 per cent. While these are rough estimates, they are consistent with those for developed countries.

32. There is now considerable experience in developing countries and economies in transition as well as in developed countries, with the application of these instruments. This experience confirms that these instruments can improve cost-effectiveness relative to conventional regulations, but it has also highlighted the need for strong institutions in the environmental sector, the importance of avoiding bureaucratic restrictions that reduce the effectiveness of economic instruments, and frequent complementarities between conventional regulatory approaches and economic instruments. A recent comparative study of the use of economic instruments in Latin America has underscored the need to take institutional constraints seriously, and to pilot-test instruments in order to "learn by doing" before implementing them on a national level.

33. The major barriers to expanded use of economic instruments include policy makers' lack of familiarity with them, the challenge of adapting instruments to serve domestic objectives within the constraints of administrative capacity and economic development, the new skills and information required of both government and private parties involved in implementation, and the management of distributional issues when the costs of environmental protection shift more directly onto polluters. Several actions may be helpful in overcoming these barriers:

- Governments and international organizations should expand their efforts to: (i) collect and share information on the use of economic instruments, especially practical lessons on building

political support for economic instruments, tailoring instruments to institutional constraints, and minimizing the administrative costs of monitoring and enforcement, and (ii) introduce pilot schemes for economic instruments, with the intention of identifying appropriate opportunities for implementing them at a broader level and overcoming factors that might diminish their effectiveness.

- When designing economic instruments, regulatory agencies should consult with pertinent national and local government agencies, businesses, and civic groups, both to generate political support for the instruments and to ensure that they work effectively in practice.
- When introducing economic instruments that raise the costs of economic activities for households and small and medium-size enterprises (SMEs), governments should consider gradual phase-ins, public education programmes, and targeted technical assistance as strategies to reduce negative distributional impacts.

C. Private sector initiatives

34. In the past five years, many large domestic firms and transnational corporations have significantly expanded their environmental management capacity. Some have formed national and international business groups such as Business Councils for Sustainable Development, which promote environmentally and socially responsible management and investment. These groups, as well as international standard setting organizations such as the International Standards Organization (ISO), have established environmental standards. Business groups and NGOs have also introduced ecolabelling schemes, which enable consumers to make purchasing decisions that are more fully informed about the environmental characteristics of production processes and provide a potential market advantage to producers that satisfy specified criteria.

35. A number of private investment funds have also begun offering individual and institutional investors the opportunity to invest in companies that have been selected not only for their financial performance, but also for their performance according to environmental and social indicators. "Green" investment funds enable investors to bring their investment decisions in line with their environmental preferences. In so doing, they monetize investors' willingness to pay for environmental protection and channel funds to companies that are more environmentally responsible.

36. A shortcoming of "green" funds and other private-sector initiatives, however, is that they often include only minimal involvement by SMEs. Small and medium-size enterprises frequently lack the scale economies, technologies and human and financial resources to invest in environmental and social improvements. They are further discouraged from taking environmental and social responsibilities seriously due to insufficient oversight from regulatory agencies. In an effort to improve the environmental performance of SMEs that are their suppliers and distributors, some large firms in both developed and developing countries have begun furnishing technical and financial assistance and linking continued business relationships to demonstrable evidence of improved performance.

37. To support these and other voluntary private-sector initiatives, governments should:

- create a competitive business environment consistent with sustainable development by implementing appropriate and stable economic, social, and environmental policies and regulations, and allocate adequate human and material resources for monitoring and enforcing these policies and regulations and increasing their transparency to businesses;
- consider the use of public procurement policies to create incentives for private-sector suppliers to improve their environmental and social performance;
- consider ways of increasing the availability and transparency of information about the environmental and social performance of firms to the public and the business community (for example, Thailand has approved a proposal making disclosure of environmental performance a requirement for listing on its national stock exchange, and the United States publishes a Toxic Release Inventory that ranks firms according to level of release);
- institute awards programmes that publicly recognize efforts by individual firms and business groups to improve their environmental and social performance.

IV. Promoting innovative international financial mechanisms for sustainable development

38. The dominant approach for financing global environmental protection has been financial transfers of voluntary contributions through intergovernmental mechanisms such as the Global Environment Facility and the Montreal Protocol Multilateral Fund. Conservation trust funds organized by international, governmental, and nongovernmental organizations, and financed similarly by (largely) voluntary sources, have also become increasingly important. Although these direct-transfer mechanisms will continue to play an essential role in financing sustainable development, the voluntary basis of their funding reduces their reliability and, unless they are structured as endowment funds, their sustainability. Moreover, their contribution relative to the magnitude of international transfers called for by Agenda 21 remains small and largely limited to the environmental dimension of sustainable development.

39. In this regard, various individuals and organizations have recently proposed implementing some limited form of international taxation as a means of ensuring significant and automatic financing of international transfers from developed to developing countries to support sustainable development. The international taxes receiving the greatest attention have been a tax on foreign exchange transactions (the "Tobin tax"), a tax on international air transport, and a tax on carbon. Each tax has several variants, representing varying degrees of full-cost pricing and having varying implications for economic efficiency. Each one also raises difficult political issues, the most obvious and most serious of which is national governments' reluctance to delegate the sovereign right of taxation.

40. Studies suggest that an international tax is more likely to be economically justified and politically acceptable if it meets the following criteria:
- (i) it is introduced as a voluntary scheme;
 - (ii) it is legislated and collected nationally, with its rate and administration nationally determined;
 - (iii) its base is large, permitting its rate to be very low without preventing it from generating significant amounts of revenue;
 - (iv) it is levied on an activity that generates negative externalities that are both obvious and global;
 - (v) most of its revenue is retained by national governments, with the amount retained being nationally determined;
 - (vi) remaining revenue is allocated in an automatic and transparent fashion to an international financial transfer mechanism, ideally one that already exists and has proven its reliability;
 - (vii) that revenue is allocated according to clear and transparent criteria to activities closely linked to reducing the negative externalities generated by the taxed activities, thus giving the tax aspects of a user fee; and
 - (viii) allocations are limited to countries participating in the scheme.
41. The carbon tax would appear to match up best against these criteria, especially (iii) and (iv).
42. It is unlikely that the time for international taxes has come. They do, however, have a conceptual appeal. Moreover, they may eventually be an inevitable consequence of regional integration, globalization of the world economy, and rising concern about global environmental degradation. For these reasons, the CSD should request appropriate organizations (for example, the World Bank and the IMF) to conduct forward-looking studies of the economic rationale and political feasibility of some form of international carbon tax.

V. Future work on finance

43. In support of the above-mentioned recommendations, the CSD should continue promoting global and regional expert meetings on cross-sectional and sectoral financial issues of Agenda 21. In this context, the CSD should also continue to support the exchange of information on financial mechanisms among interested parties through meetings, publications and the development of electronic databases. The CSD should make a special effort to involve in its activities, and to

disseminate information to, representatives of ministries of finance and other ministries concerned with economic management, in order to make them more receptive to the integrated view of resource mobilization and policy reform that the Expert Group has developed in its four meetings.
