

# WORLD TRADE ORGANIZATION

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## Committee on Trade and Environment

### REPORT OF THE MEETING HELD ON 19-20 MARCH 1998

#### Note by the Secretariat

1. The Committee on Trade and Environment (CTE) met on 19-20 March 1998 under the chairmanship of Ambassador C.M. See of Singapore. The agenda in WTO/AIR/790 was adopted.

#### Observer status for international intergovernmental organizations

2. The CTE agreed to extend observer status to the World Intellectual Property Organization.

#### Work programme and schedule of meetings for 1998

3. The CTE adopted its work programme and schedule of meetings for 1998 (see Annex).

4. The Chairman said his general objectives this year will be to further the Committee's analysis of all items on the work programme and to increase an understanding of the problems the CTE was dealing with. The Chairman also felt it was important to continue to broaden the participation in support of the analysis of the CTE by inviting representatives of Secretariats of those multilateral environmental agreements (MEAs) relevant to the work of the CTE to inform the Committee of relevant developments in their respective agreements. Finally, the CTE would produce a report to the General Council at the end of the year. In preparation for the Information Session with selected MEA Secretariats at the 23-24 July meeting, the Chairman invited Members to inform the Secretariat of those MEAs which they considered could most usefully be invited to participate.

5. The Chairman, on behalf of the CTE, congratulated the WTO Secretariat on its successful organization of the NGO Symposium on Trade, Environment and Sustainable Development on 17-18 March.

6. The Deputy Director-General of the WTO commented on the NGO Symposium on Trade, Environment and Sustainable Development which had been attended by approximately 150 non-governmental organizations (NGOs). The opening session had involved the participation of the Director-General of the WTO, the Secretary General of UNCTAD, the Executive Secretary of UNEP and the Deputy Administrator of UNDP. The Symposium had provided a unique opportunity for NGOs and representatives of international organizations to discuss informally their views in the presence of WTO Members. A number of useful suggestions had been made for any future event, including the nature of participation, issues to be addressed, format for discussion and possible outcomes. The Director-General had closed the meeting expressing his satisfaction with respect to the debate which had taken place, the participation of NGOs and particularly the fact that such a large number of governments had been present throughout the proceedings. The Deputy Director-General thanked those Member governments whose financial contributions had made the Symposium possible and said the Secretariat would continue to build on its cooperation with representatives of the NGO community.

7. The representative of the European Communities recalled that the EC was one of the proponents behind the establishment of the CTE. The history of the CTE was well known, although

in comparison to its parent organization, soon to be 50, it was still rather young. Since the 1996 Ministerial Conference, the work of the Committee had followed a more analytical path. Like many Members, the EC felt the work of the Committee to analyse the items on its agenda had been constructive, but the May Ministerial Conference would provide an opportune moment to reflect on where the CTE was and how to proceed thereafter. Such reflection was all the more necessary given the statements at the NGO Symposium on 17-18 March. The EC and its Member States had participated with great interest and listened carefully to the comments made by the speakers, particularly from participating NGOs. The EC had been impressed by the widespread feeling among the speakers that so far the CTE had not delivered. There had been numerous calls for the CTE to be revitalized. It was especially telling that the WTO Director-General had not hidden his critical evaluation and disappointment with the lack of concrete results achieved so far. The EC was prepared to contribute unreservedly to such an important exercise and had given some thought to how this could be done.

8. The EC believed the trade and environment axis should become central to the work of the WTO in all its aspects as the trade and environment debate had to be brought more into the WTO mainstream. In fact, experience and academic study since the end of the Uruguay Round continued to bolster the view that trade and environment could be mutually supportive towards the aim of achieving sustainable development, in particular through a proper and oriented synergy between global liberalization and a high level of environmental protection. The EC felt there were important deadlines ahead, including the next two Ministerial Conferences, and the trade and environment interface would receive increasing attention. Not only was there much work for the WTO to do on the environment front, it seemed likely that for any major new package of WTO agreements to be adopted and implemented in the decades ahead, it would be essential to have the support of the environment and sustainable development communities in both developing and developed countries.

9. The environmental benefits of removing trade restrictions had been a significant element in the Committee's debates so far. This topic was an important item on the work programme of the CTE but, in the EC's view, it was essential to devote a similar level of attention to the MEA cluster and to the linkages between clusters. All economic sectors examined in WT/CTE/W/67 and its addendum, were relevant not only to CTE work but also to that of the WTO in general. In any future global package, all such sectors would be covered, but the EC was determined to ensure that environment related issues would also be given due weight as a horizontal element to be taken into consideration in all areas. The CTE could thus identify and examine practical ways in which the trade and environment interface could result in "win-win" situations. Such analyses would make a significant contribution to helping meet the provisions and expectations as regards capacity building in, and the transfer of technologies to developing countries, an aim embedded in many MEAs. The EC felt proper attention had to be given to environmental concerns throughout the work of the WTO; in due course, and certainly before the 1999 WTO Ministerial, it would be useful, under the auspices of the WTO and possibly in cooperation with other international organizations, to strengthen the dialogue between top-level trade and environment policy makers in order to push forward the process by which the CTE debate became relevant to broader WTO decision-making. This would require a willingness on the part of all concerned to focus the dialogue on the relevant topics so that the debate and the analyses could move forward.

10. The representative of India assured the Chairman of India's support for the important work that lay ahead for the CTE in 1998. All ten Items of the work programme were equally important and relevant to the mandate of the CTE. India thanked Ambassador Ekblom of Finland for the significant work that had been undertaken in the CTE under his chairmanship in 1997. Since its creation in 1995, the CTE had carried out significant work, the 1996 Report of the CTE, adopted by Ministers in Singapore, was an example of its vitality. India felt that CTE work and the expectations that were reposed in it had been unanimously agreed in 1996 when the CTE was made a WTO Standing Body; its work and Members' expectations for this work had to be consistent with that of other WTO Standing Bodies. The complex issues the CTE was addressing had to be viewed in light of the

primary function of the CTE as a WTO Standing Body, which was to uphold the integrity of the multilateral trading system.

11. The representative Japan asked that informal CTE meetings be organized to enrich the debate. Like the EC, Japan felt MEAs were important and the balance between MEAs and market access should be maintained. The *ad hoc* dialogue with NGOs was also important.

12. The representative of Argentina expressed his delegation's satisfaction with the organization of the NGO Symposium.

13. The representative of Norway said the NGO Symposium had underlined the need for further dialogue with NGOs. As noted by the EC, trade and environment would receive increased attention due to the upcoming Ministerial Conferences. In this context, the role of the CTE may need to be reworked. In addition to the CTE, other WTO Bodies and future negotiations in the WTO should take environmental aspects into consideration where appropriate.

14. The CTE expressed its appreciation for the leadership provided by Ambassador B. Ekblom of Finland during his chairmanship of the CTE in 1997.

Item 6            The effects of environmental measures on market access, especially in relation to developing countries, in particular to the least developed among them, and environmental benefits of removing trade restrictions and distortions

#### Sectoral analysis

15. The Chairman recalled that the focus of the meeting was on the Items of the work programme related to the cluster of market access and that agreement had been reached to undertake a sectoral discussion of Item 6 based on relevant national submissions and Secretariat documentation. Each sector would be dealt with in the order presented in WT/CTE/W/67 and its addendum, namely agriculture, energy, fisheries, forestry, non-ferrous metals, textiles and clothing, leather, and environmental services.

#### Agriculture

16. The representative of Argentina said that according to the World Bank, among the most powerful policies to improve environmental management were those that used the market and price signals to make appropriate allocation of resources. Environmental resources (e.g., land, water, biodiversity, fisheries) were typically underpriced in two ways: (a) by subsidies that actually reduced the cost of overexploiting or polluting the environment; (b) by the failure of markets that normally tended to reflect only the private costs of production, ignoring the damages inflicted on others by pollution and depletion of natural resources. Therefore, ensuring that growth and sustainable development were compatible required a two step reform: (a) moving towards free market prices, i.e. prices that reflected the full private marginal cost of production; and (b) moving beyond free market prices, in order to allow prices to reflect the full costs of production. Consequently, subsidy removal was only a first step towards sustainable development, but it was an indispensable one. Given the global market, this should be a coordinated policy. Isolated markets were theoretical constructs. Developed countries, particularly the richest among them, were the only ones that could heavily subsidize production and exports. In so doing, they were not only allocating internal budgetary resources and forcing their consumers to pay a hidden tax, but they were also distorting international prices.

17. The representative of Argentina said that according to the OECD, in 1987 the level of agricultural support in OECD countries was about US\$280 billion. This level of support was highly

concentrated in a very few of the OECD countries and was one of the most distortive, inefficient and non transparent ways of support: market price support. According to OECD, only 20 per cent of the US\$280 billion spent during 1987 went to the farmers, the rest was capitalized into land values and captured by input suppliers. In highly intensive agricultural practices this meant more fertilizers, herbicides, pesticides, energy, irrigation, and accordingly, more environmental degradation. The representative enquired as to what this meant for the global environment and for food security and sustainable development of non-OECD countries. Whenever a wealthy government decided to subsidize agricultural production and exports, it was encouraging new investments in that sector and consequently preventing those investments to go elsewhere, such as to developing countries where agricultural production was less intensive and where poverty, particularly rural poverty, was responsible for environmental degradation. Moreover, developing countries had no way of introducing sound environmental reforms if this irresponsible policy continued. He asked how would an agricultural producer be required to stop soil degradation and to shift to environmentally friendly ways of farming, when actually overexploiting and reducing the stock of his natural capital might be the only alternative to bankruptcy.

18. In Argentina's view, prices should reflect environmental costs of production. This had been agreed to by all countries at the Rio Earth Summit. This could not occur if prices did not even reflect private production costs. Previously, government interventions affected national efficiency and resulted in local environmental damage; this situation had changed. Goods (except for agricultural products), capital and technology could flow almost freely through the global market. Today countries were more interdependent and agricultural subsidies, among other subsidies, had harmful global effects. The representative asked how efforts could be coordinated to solve this situation. Future agricultural negotiations after 1999 would offer an opportunity to ensure cooperation to harvest gains both in terms of economic and environmental efficiency. This would represent a genuine "win-win" situation for the local and global environment. When a farmer decided how much of input was needed, such as fertilizers, pesticides, herbicides or irrigation water, he considered both the expected benefit and input costs. Since most OECD countries' agricultural subsidies were provided through price support policies, farmers used inputs until the marginal return obtained from using an additional unit of the input equalled its cost. If prices were supported, returns increased, which increased input use. Removing subsidies was thus a first step to ensuring that environmentally damaging inputs were used in a socially optimal way as set out in a World Bank publication.

19. In Argentina's view, removing subsidies was also necessary to get prices right. Healthy prices needed to reflect private and social costs of production. Prices portrayed a message that dealt with the scarcity of natural resources involved in production and determined decisions made by investors, producers and consumers. Some governmental policies such as subsidies distorted prices and negatively affected decisions on investment, production methods, international trade and consumption patterns. As a result economic efficiency, international trade and environment all suffered. Argentina was not trying to suggest that if countries responsible for these practices removed subsidies which encouraged production and exports it would necessarily result in socially optimal outcomes. These countries would also need to go beyond the market, namely to cope with market failures and create incentives to account for environmental externalities. The process had to begin somewhere and the best place to begin was by eliminating those subsidies that prevented prices from reflecting private production costs.

20. The representative of Japan said that a comprehensive analysis should include both the positive and negative environmental effects and include reference to the fact that the extent and nature of the environmental impact of trade measures varied according to natural conditions, such as climate, soil, production methods and other economic and social conditions in each country and area. It was inappropriate to draw the simplified conclusion that all trade measures deterring trade liberalization should be removed while focusing only on environmental benefits. WT/CTE/W/67 cited many references to the positive environmental effects of trade liberalization, but descriptions of negative ones were few. This gave an unbalanced impression as had been noted in the NGO Symposium.

More empirical analysis was necessary of the possible negative effects of trade liberalization on the positive environmental externalities associated with agriculture, as mentioned in footnote 38. As agricultural activities were based on various natural conditions, an analysis of the environmental effects of agricultural liberalization should not be simplified. For instance, in Asian monsoon areas, paddy fields played a multifunctional role in environmental protection, such as to prevent soil erosion and floods.

21. In Japan's view, empirical analysis was needed on the environmental effects of the production shifts led by trade liberalization. The long term consequences on the environment of these shifts were difficult to determine given the variety of conditions of agriculture in each country and region. Production shifts from cereal to vegetables or fruits led by market mechanisms might require increased use of fertilizers and pesticides. In such cases, trade liberalization did not necessarily automatically lead to positive environmental effects. Japan shared the concerns related to the negative effects of trade liberalization which many NGOs had expressed in the NGO Symposium. Empirical experiences related to the negative impacts of agricultural trade liberalization would have to be examined carefully in order for the CTE to carry out a comprehensive analysis of the environmental effects of trade liberalization.

22. The representative of Australia said agriculture was in absolute terms by far the most heavily subsidized sector and there was little doubt that this had negative environmental implications through the concentration of production regionally and the promotion of less sustainable methods of production, particularly through the overuse of fertilizers and pesticides and the underuse of crop rotation. WT/CTE/W/67 noted that those economic policies which distorted trade were evolving, with Uruguay Round commitments and were important along with domestic policy considerations. The document noted that despite the increasing importance of direct payments, the greater part of assistance remained in the form of commodity-based market price support which directly boosted prices and production in the countries concerned. This effect was often reinforced by tariffs and export subsidies which compounded the flow through effects these measures had on international markets. The environmental effects of these support policies were clear, with agricultural production levels and intensity higher than they would be in their absence. This particularly related to the use of agricultural chemicals, fertilizers, water use, farm management systems, intensive methods of animal husbandry, and the widely accepted link with environmental problems, such as water and soil quality deterioration, and local air pollution.

23. According to Australia, WT/CTE/W/67 usefully assessed the likely environmental effects of agricultural trade liberalization, referring to economic modelling which predicted some reallocation of production from subsidising to non-subsidising countries, particularly developing countries. Many of the adverse environmental effects associated with current agricultural support should be reduced as support levels were reduced. However, environmental externalities associated with freight transport might rise, reallocation to export crops might increase agricultural specialization with negative environmental effects in some countries, or increases in production in some countries might be particularly damaging due to the environmental policies or conditions holding there. Whilst these points were valid, they emphasized the importance of environmental policy rather than being a reason for policy paralysis in the face of a pressing need for trade liberalization. That trade liberalization will have economic benefits by increasing efficiency and economic growth and that this could feed into improved environmental management was another tenet of WT/CTE/W/67. Mention was also made of the possible environmental negatives that economic scale effects might produce (i.e. the GDP link to climate change), but the overall message was that these effects were more a ramification of overall economic development rather than the contribution that trade liberalization might make to growth. This scale effect would more suitably be dealt with through environmental policies, such as the OECD "Factor 10" initiative which prescribed improvements in input efficiency, especially for toxic materials.

24. In Australia's view, future discussions should identify major agricultural trade policy reforms which could contribute to environmental improvements. One priority was a stronger move away from market price support. Attention should be given to the fact that direct payments to farmers continued to provide an incentive to maintain excessive levels of production and input use. A key issue for future reform efforts would be to impose greater discipline on those direct payments which had significantly increased in recent years and to ensure that these disciplines were consistent with the objective of promoting sustainable development, including in relation to sustainable agricultural practices. This would require further substantial reductions in support levels and restructuring of the type of support provided so as to minimize the linkages to input and production levels. It was felt that another key reform area must be reductions in tariff escalation and tariff peaks, including for processed agricultural products. Improvements in market access opportunities was a central issue on the agricultural trade reform agenda. A yardstick for assessing the success of future negotiations must be whether they enhanced opportunities for agricultural exporting countries to increase their export earnings while adopting sustainable resource management policies, including greater opportunities to diversify economic activities. Increased processing of agricultural products in primary producing countries could reduce the pressure to earn foreign exchange through increased exploitation of the natural resource base. Such a diversification in the economic structure posed its own environmental challenges and highlighted the importance of appropriate and well-targeted environmental policies to ensure greater economic growth was consistent with sustainable development.

25. The representative of the Philippines, on behalf of ASEAN, endorsed much of the content of WT/CTE/W/67, particularly on agriculture. This document took a balanced approach to the environmental benefits of removing trade restrictions and distortions and presented the positive and negative environmental externalities associated with trade liberalization, whether on the soil, ground or effluent water, or the air. The elimination of agricultural trade restrictions and distortions could substantially contribute to the realization of environmental benefits. WT/CTE/W/67 contained an empirical and theoretical analysis which provided good arguments for those engaged in WTO work on agriculture. The environmental impact of distortions created by agricultural support policies was significant and was not only seen in the environment of those who could afford to subsidize, but also in the environment of those who were denied a chance to compete in world markets or even their own market. This impact was exemplified in the case of cereals and dairy, where developed countries tended to mix a highly distortive policy cocktail of market price support, deficiency payments, production quotas and direct income support. The recourse to export subsidies where production quotas were not able to prevent domestic surpluses made the absurdity in world agricultural trade apparent. This example could be extrapolated to products such as meat, grains and vegetable oils. ASEAN supported the caveat that if production and consumption externalities were adequately integrated into decision-making processes, trade and environment objectives were mutually supportive. Reality dictated, however, that such integration would be difficult to carry out if countries, especially developing countries, did not have the initial capacity to contemplate environmental protection. Whilst the environmental benefits of trade liberalization were clear, ASEAN felt the removal of agricultural distortions should begin in those countries which had the resources to support and distort agricultural prices.

26. The representative of the European Communities said the agricultural section in WT/CTE/W/67 contributed to the discussion and had taken account of the EC's comments. The analysis would have benefitted if account had been taken of different agricultural sectors as the environmental effects varied broadly from sector-to-sector. It would have been useful to have considered the different schedules for the implementation of changes in production as the link between agricultural liberalization and environmental benefits was not automatic. Price levels and the intensity of agricultural production depended not only on liberalization, but to a large extent on the development of markets, population growth and technological innovation. As long as prices did not reflect environmental externalities, whether cost or benefit related, market mechanisms would not automatically lead to an optimal allocation of resources. As such, environmental policies tried to correct these market imperfections. Trade liberalization often required accompanying resource

management and environmental policies, a point which could have been emphasized in the document. In developing countries, trade liberalization and the resulting changes in price structures could under certain conditions lead to an intensification of production and soil degradation, particularly if production shifted to export crops. Agricultural intensification could be affected by increased need for food products in those countries. The document could have given more attention to the positive externalities associated with agricultural practices, such as the preservation of biodiversity, regulation of micro climates, prevention of soil erosion and floods, and maintenance of local communities and crops.

27. The representative of Korea said the NGO Symposium had touched on a wide range of issues related to the environment, trade and sustainable development. The Symposium had illustrated that sustainable development was a concept encompassing not only environmental protection, but also economic growth and social development. Linkages between the environment, trade and sustainable development could best be explored through cooperation and shared responsibilities among the WTO, UNCTAD, UNEP, UNDP, as well as NGOs. It had also been noted during the Symposium that trade liberalization *per se* was not an end in itself. Although it was widely recognized that the removal of trade restrictions and distortions had potential environmental benefits, these benefits were not to be gained simply by liberalizing trade, but should be accompanied by proper environmental policy.

28. Korea underscored that benefits from agricultural trade liberalization should be viewed from the wider perspective of sustainable development. Korea had already explained in detail the positive environmental effects of agriculture and WT/CTE/W/67 shed some light on the positive environmental externalities associated with agriculture, but the analysis was tilted to the environmental benefits of agricultural liberalization. Agriculture helped prevent soil erosion and floods, adjust micro-climates, preserve biodiversity, provide recreational spaces, and maintain local cultures and communities. Different perspectives on the impact of agriculture trade liberalization should be reflected in a balanced way when the analysis is updated. As noted in WT/CTE/W/67, ascertaining the outcome of agricultural liberalization was difficult as there were a number of uncertainties and country-specific situations. More empirical data was needed to determine the net environmental impact of trade liberalization. Confronted with the unavailability of a clear-cut analysis, other objective ways of assessing environmental benefits should be explored. The CSD was developing sustainable development indicators to objectively measure the achievements of sustainable development in all relevant fields and the OECD was developing similar indicators focusing on the environment and agriculture and composed of 8 indicators, including landscape and biodiversity. These approaches could also be used in the WTO. The Secretariat should consider the development of these indicators capable of quantifying the environmental effects of agriculture.

29. The representative of New Zealand said the discussion on agriculture pointed to several tangible benefits from trade liberalization in this sector. New Zealand had reformed its agricultural policies beginning in the mid-1980's as its policies were unsustainable. These policy reforms, however, had had important environmental benefits. They had led to less intensive production systems, less fertilizer use, less energy use in production, less specialization of production and less monoculture creating a more attractive landscape in some areas. Marginal and easily erodible lands had been taken out of agriculture. A less obvious environmental benefit was that policy advisors previously responsible for administering a panoply of agricultural assistance measures were now free to face new challenges, including environmental policy challenges. He noted the prominence given in WT/CTE/W/67 to the environmental problems which could arise from support schemes that artificially encouraged farmers to increase production resulting in, amongst other things, soil degradation and the overuse of fertilizers and pesticides. There were other effects which should be examined, including the negative environmental consequences of disposing of the surplus agricultural products created by such support schemes. Whilst not wishing to underestimate the importance of the social concerns set out in paragraph 15, such concerns should not be used as an excuse to refrain from greater trade liberalization which could bring social benefits. He noted the importance attached

elsewhere in the document, such as in paragraph 10, to assessing reforms from an economy-wide perspective.

30. In New Zealand's view, the reference made in paragraph 40 to the issue of green buffer zones and the "scenic beauty of the landscape" were not convincing arguments against the need for greater agricultural trade liberalization. It was possible to implement domestic environmental policies for these purposes whilst also pursuing liberalized trade objectives. Environmental policies could in fact contribute indirectly to the development of trade, such as in tourism services. Trade liberalization placed no barrier on the adoption of environmental policies; the two were not mutually exclusive. Reference had been made to the fact that trade liberalization could lead to adverse environmental effects and that, before dismantling trade distortions, these effects should be studied. In this context, he referred to Argentina's point that as a first step it was important to get the prices right. Without correct prices, it was difficult to determine the environmental effects of trade distorting policies.

31. The representative of the United States said there could be little doubt that agricultural trade liberalization could yield "win-win" situations for both trade and the environment. One of the most important results which could emerge from the CTE would be to have a more informed debate on the relationship between these barriers and environmental improvements. In the Uruguay Round, there had been many false arguments raised that if trade were liberalized there would be adverse agricultural and environmental effects. One of the problems that these arguments made evident was that in the absence of good information it was easy to be misled. The purpose of the CTE was to inform this debate. Distortion to market signals had caused significant environmental problems with respect to overuse of fertilizer, distorted land values and wasteful agricultural practices. For this reason, many countries which had previously protected their agricultural communities had found a need to reform their policies. He agreed with Argentina that subsidies would be an important area of work in future agricultural discussions, but there were also other areas of distortions which equally deserved attention, including high tariffs and certain practices of state trading enterprises. The US did not disagree with those delegations who felt there was a need to look at the environment benefits which can arise from agricultural trade liberalization on a comprehensive basis. The CTE was at an exploratory stage; the first step had been taken with respect to liberalizing agricultural trade and it was now possible to determine the impacts. In this respect, the US had been interested to learn of New Zealand's national experience. Specific national experiences of those countries which had suggested that trade liberalization could lead to adverse environmental effects would also be useful. While arguments had been put forward on the beneficial environmental effects of rice paddies, he asked if this meant there was an argument for putting rice paddies across entire landscapes. Statements at the NGO Symposium had noted the importance of ensuring complementary policies were in place to deal with any possible adverse effects of liberalization. This was not a reason to forestall trade liberalization; rather, as liberalization was occurring, potential environmental impacts should be examined and efficient policy approaches found.

32. The representative of Switzerland said, concerning the agricultural sector in WT/CTE/W/67, his delegation had some difficulty with the use of the term subsidy which considered subsidies systematically to be the source of the problem. A subsidy which aimed at enhancing polluting production methods or the use of toxic products should be removed. However, there were certain forms of internal support which could be environmentally beneficial. Switzerland cited its national experience with the use of chemical fertilizers. A recent assessment of a network of 200 pilot farms carried out by the Swiss Agricultural Department showed that Swiss farmers were using less chemical fertilizers. Current consumption of nitrates was now below 1950 levels. Since the beginning of agricultural reform in 1996, the quantity of nitrate fertilizers had dropped by 15 per cent, and by 2002 was expected to drop further by 25 per cent. These figures formed a pluriannual comparison of traditional farming, integrated production and biological production, based on which ecological direct payments had been developed. As a result of these payments, fruit trees had become alternatives to traditional production and the share of fallow land had dropped considerably. These figures highlighted that all forms of internal agricultural support were not environmentally harmful.



Although paragraph 35 of WT/CTE/W/67 referred to the positive environmental effects of reverting land to recreational and other non-farm uses, several studies had shown that the use of land for tourism was less favourable for biological diversity than certain agricultural practices.

33. The representative of Canada said that the introduction and the agricultural section raised the importance of domestic prices to capture the effects of environmental externalities. However, the implications of this failure for liberal trade regimes had not been explained. The potential contribution of trade liberalization to the efficient allocation of resources was undermined in part by such market failures. This point was consistent with the position on the environmental effects of agricultural trade liberalization which Canada had taken at the OECD joint working group on agriculture and the environment. Canada associated itself with the comments made by Argentina and Australia and welcomed New Zealand sharing its national experience in removing subsidies. The CTE would benefit from such exchanges of experiences. Trade liberalization was a necessary, but not a sufficient condition for environmental sustainability. Although WT/CTE/W/67 noted that "the abandonment of lands could reduce land values, decrease green buffer zones, and lead to a decline in the scenic beauty of landscape", set aside programmes or those aimed at removing lands from agricultural production generally targeted environmentally fragile lands which were marginal in terms of agricultural productivity. Canada, like New Zealand, felt that the impact on land values of scenic beauty was an economic and cultural issue which was unlikely to be furthered usefully by the CTE. For example, it was not clear how green buffer zones would be decreased by land abandonment unless the land were put to other uses. The concern noted about the environmental risks of increased freight traffic under trade liberalization could be addressed through SPS notifications: 365 agricultural related notification had been received under the SPS Agreement between 1995 and 1997. On the shift from varied agricultural production to monoculture as food crops were replaced by export crops, both environmental and poverty issues were involved and more empirical data was needed to reflect these linkages.

34. The representative of Norway said that WT/CTE/W/67 set out the premise that the failure to capture the effects of environmental damaging activities sent misleading signals on optimal resource use. The document did not examine how widespread such externalities were in agriculture, nor the extent to which agricultural policies (such as in the form of taxes or subsidies) internalized external effects and ensured a more optimal resource allocation than otherwise would have been the case. Further analysis could be added on the extent of externalities and the role of agricultural or environmental policies to internalize externalities. In Norway's view, the document could also explore to what extent trade liberalization and environmental objectives were mutually supportive if externalities were widespread and not internalized. The list of environmental effects in paragraph 13 should include degradation of cultural landscape; the last sentence: "deforestation and other land misuses are encouraged" should be changed to: "deforestation and other land misuses may be the result." It was important to bear in mind in paragraph 14 that some support was paid as compensation or encouragement to farmers for addressing environmental aspects, which could be viewed as a direct payment for production of positive environmental externalities. In the first sentence of paragraph 15 "in some countries" should be deleted; it should also be noted here that the OECD Agricultural Ministers in March 1998 had addressed the multifunctional role of agriculture, and noted that well-targeted policy measures "will enable the sector to contribute to the viability of rural areas and address environmental issues, while enhancing efficient and sustainable resource use in agriculture".

35. In Norway's view, the last sentence of paragraph 15: "social and environmental concerns may be important ..." should be changed to "are important". Paragraphs 33 and 34 gave an oversimplified presentation of the issue concerning whether agricultural expansion in regions where it was less supported would result in negative environmental effects such as loss of biodiversity, deforestation, and soil degradation. Positive externalities cited in footnote 38 were important and should be elaborated and dealt with in the text itself. Urbanization resulting from reduced agricultural activity could have harmful environmental effects and deserved more attention. In paragraphs 39 and 40, a reduction of the arable land might also include other negative effects, such as centralization of the

population due to the few alternative employment opportunities and loss of cultural landscape, which had value not only as a biotope but also by providing recreational and scenic qualities.

36. The representative of India said that, as a predominantly agricultural country, India was interested in this sector. On paragraph 33 and footnote 28 of WT/CTE/W/67, it was important to keep in view that for a self-sufficient and exporting developing country any stimulation was positive; hence, subject to food security considerations, liberalization should be encouraged. Although certain negative impacts of liberalization were noted in paragraph 40, it was precisely for these reasons, as noted in paragraph 3, that accompanying domestic environmental policy were important for sustainable development. On the differentiation between food crops and export crops in paragraph 42, it was necessary to keep in mind that for many developing countries export crops were not necessarily non-food crops, such as rice. Further study was required before any of the contentions in paragraph 43 were accepted; trade would likely not increase but be redirected as production moved to areas of comparative advantage, which was in line with the conclusion in paragraph 33. Discussion of farm practices in paragraph 45 needed to keep in mind the plight of small and medium farmers.

37. The representative of Brazil shared the view of Argentina, Australia and New Zealand and felt the CTE should deepen the analysis of potential "win-win" situations. Brazil was interested in examining market access in the agricultural sector, which represented 40 per cent of Brazil's GNP. Trade barriers in this sector affected Brazilian agricultural exports and prevented access to financial resources that may be applied to sustainable production methods. Brazil encouraged delegations to contribute their national experience to provide a more informed debate. Brazil would like to contribute to the process of identifying "win-win" situations by presenting the case of Brazilian soya plantations. Given the biodiversity in the Brazil, agriculture had different environmental impacts which called for different models of sustainable production. Among the challenges to develop these models, there was a need to achieve optimal agricultural incomes. In Brazil, the question of agricultural income was directly linked to the introduction of environmental management systems in agriculture. The maintenance or elevation of optimal levels of agricultural income was linked to better market access for commodities.

38. The case of soya plantations was a significant example of the linkage between income and the use of environmentally sound farming practices. Brazil is the second largest world soya producer; with one third of national production going to the internal market, and the other two thirds being exported, which represented US\$3.8 billion in 1995. The revenue yielded by soya depended on access to foreign markets. These revenues had allowed for the introduction of Direct Planting techniques in soya cultivation. Since 1990, the use of Direct Planting as a sustainable production practice had permitted an increase of approximately one million hectares of soya per year. This system had also permitted several environmental benefits, such as the reduction of soil erosion by more than 90 per cent, and the reduction of pollution from agro-chemicals. Carbon emissions also had been reduced by 40 to 70 per cent as a result of decreased use of diesel in farming. Herbicide and pesticide use had also been considerably reduced. The fact that soya yielded the best levels of agricultural income among Brazil's main agricultural products was an example of how market access stimulated sustainable production. Concrete examples from other delegations may be useful to show the link between trade and the introduction of environmental management systems.

### Energy

39. The representative of Brazil said WT/CTE/W/67 was a basis for discussions of "win-win" situations. To deepen work on market access, Members could present their own contributions to include other areas or specific products that might benefit from trade liberalization and would also be of environmental benefit. Brazil felt the CTE should give special consideration to the energy sector. As WT/CTE/W/67 noted, production in the energy sector was not an end in itself, but an important input to almost all economic activities. The document identified petroleum, coal, natural gas and electric power as the primary energy sources. The document identified that this sector was still

considerably subsidized and some energy taxes still restricted trade; the removal of subsidies and the restructuring of taxes to bring energy prices in line with marginal social costs could result in significant environmental benefits. Following these conclusions and considering the commitments established in the Kyoto Protocol, Brazil addressed renewable energy sources, particularly the case of alcohol fuel. Article 4(d) of the Climate Change Convention established that all Parties should "promote sustainable management, and promote and cooperate in the conservation and enhancement, as appropriate, of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems". Articles 10 and 11 of the Kyoto Protocol went further in the implementation of those commitments to "formulate, where relevant and to the extent possible, cost-effective national, and where appropriate regional programmes to improve the quality of local emission factors ...", and formulated and implemented programmes that would, *inter alia*, concern energy, transport and industry sectors as well as agriculture, forestry and waste management. In view of these commitments, Brazil proposed that the CTE explore "win-win" situations related to energy. Developing countries might benefit from market access, while developed countries might have better access to cleaner renewable energy sources that reduced anthropic emissions responsible for increasing the greenhouse effect.

40. Brazil presented its national experience with the use of ethanol fuel. In response to the oil crises of the mid-1970s, the Brazilian government, in cooperation with private industry, in 1975 created the National Alcohol Programme ("PROALCOOL") to produce alcohol from sugar cane and to build ethanol compatible engines. To better balance Brazil's petroleum consumption with its crude oil production, research was conducted from the late 1960s to the early 1970s to identify an economically viable alternative to oil as a fuel source. Ethanol, extracted from sugar cane, was chosen as one of these alternatives. By 1985, when the programme had been in operation for ten years, some US\$6.5 billion had been invested in the production of 50 billion litres of ethanol, some 500,000 jobs had been created, 2.5 million vehicles were running on pure ethanol, and all the gasoline at filling stations had a blend of 20 per cent ethanol. Brazil had technology and equipment capable of maintaining a 16 billion litre annual output and of potentially exporting the related technology, equipment and services. By dramatically reducing the level of carbon monoxide released by motor vehicles, PROALCOOL was contributing to Brazil's efforts towards environmental protection. Since ethanol from sugar cane was a renewable resource, 15 per cent of Brazil's total emissions, or 9.45 million tons of carbon, from fossil fuel was avoided. Around 25 per cent of passenger cars manufactured in Brazil currently used ethanol. Today, a few countries around the world, like Canada, the US and South Africa were also testing both blended and neat (near 100 per cent) alcohol fuels (in the U.S., for instance, ethanol blends made up about 12 per cent of the total gasoline market.) In some other countries, projects were underway to test the viability of replacing diesel fuel with ethanol.

41. Brazil found the use of ethanol had several environmental benefits, particularly related to the reduction of greenhouse gases in support of the Kyoto commitments, such as: (a) reductions in carbon monoxide levels (25 to 30 per cent reductions in emissions with a 10 per cent ethanol blend with gasoline; and up to 70 per cent reductions with ethanol fuel); (b) reductions of carbon dioxide emissions. Although carbon dioxide was released when ethanol was burnt, it was recycled into organic tissue during plant growth; in fact, ethanol use in gasoline might even result in a net reduction in atmospheric carbon dioxide levels; (c) use of a renewable resource. Ethanol was derived from renewable biological feedstocks such as agricultural crops and forestry by-products. Commercial alcohols might use sugar cane, corn or other plants as a resource for producing ethanol; and (d) reductions in ozone depleting emissions. The use of ethanol or ethanol-blended gasoline resulted in a net reduction in ozone-depleting emissions, such as carbon monoxide and hydrocarbons. Other benefits were also worth mentioning, like the creation of jobs and the retention of rural populations. Gas emissions from sugar cane production were also smaller than those of other energy sources.

42. Similar to the traditional energy sources identified in WT/CTE/W/67 (petroleum, coal, natural gas and electric power), ethanol faced high tariffs. Major developed countries applied tariffs which ranged from US\$0.17 to US\$0.33 per litre for ethyl alcohol. Some countries also applied additional duties to their tariffs, adding, for example US\$0.1427 to a tariff of 2.8 per cent. Concerning other trade distortions, subsidized exports in some countries might reach US\$39.3 million on 450,000 hectolitres of ethyl alcohol. Reducing subsidies might result in lower costs for alcohol production. It was a fact that the development of the alcohol industry had benefitted from subsidies in its initial phases in response to the increase of the price of oil during the 1970s and the 1980s. Those subsidies, however, had been gradually phased out. Brazil acknowledged that certain subsidies in the energy sector could be used to provide incentives for the development and use of renewable energy or more environmentally sound technology as was noted in paragraph 60 of WT/CTE/W/67. Brazil envisaged that better market access for ethanol would depend on future technological changes in car engines towards the use of 100 per cent ethanol fuel. Some countries already blended their gasoline with a small percentage of ethanol, which represented a significant opportunity for ethanol producers.

43. Brazil intended to present further information on this issue. The potential existed for tariff reductions and the elimination of trade distortions related to this specific product to provide improved market access conditions to this cleaner energy source, improved efficiency in the allocation of resources and environmental benefits. Alcohol provided a concrete example of a "win-win" situation, which would endorse the main objective of the CTE to ensure that trade and environment were mutually supportive.

44. The representative of the European Communities said that the emphasis on energy in WT/CTE/W/67 was on the effects of subsidies and taxes related to fossil fuels and the contribution their reduction could make to environmental quality. This was important, but the assessment needed qualification. Although subsidies removal for some energy sources, such as coal, could bring automatic environmental benefits, other accompanying measures were often necessary to promote the internalization of environmental externalities in energy prices. Internalizing environmental externalities arising from energy production and use was a fundamental requirement, and the role that taxation could play in achieving this objective had not been sufficiently emphasized in the document. It would also have been worthwhile to give greater consideration to the positive environmental effects that could arise from reducing trade restrictions which had an impact on renewable and environmentally sound technologies related to energy. The increasing importance of global environmental problems, in particular climate change, resulting from the use of fossil fuels had not been adequately addressed in the document. It would have been useful to refer to the Kyoto Protocol to the Climate Change Convention under which Annex I countries had accepted quantified emissions limitation and reduction commitments for six greenhouse gases. Annex I Parties had agreed to progressively reduce or phase out market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that ran counter the objective of the Climate Change Convention and to apply market instruments (Article 2.1(a)(v) of the Kyoto Protocol). Annex I Parties had also agreed to cooperate with each other to enhance the individual and combined effectiveness of their policies and measures in this and other areas.

45. The representative of India supported the EC's suggestion that the CTE discuss the Kyoto Protocol. He agreed with the statement in paragraph 57 of WT/CTE/W/67 that energy had an impact on all aspects of economic activity. India was concerned about the proposed need to assess significant environmental benefits of removing energy subsidies in developing countries, as mentioned in paragraph 67. India would assess the impact on production costs, access to new technologies, especially information technology. Apart from addressing the issue of removing energy subsidies, noted in paragraph 70, the transfer of environmentally sound technology should also be examined as another way to promote energy use. India would comment on the coal sector referred to in paragraph 73.

46. The representative of Canada said that in the wake of the adoption of the Kyoto Protocol, the scale and increasing nature of coal subsidies which persisted in some countries was disturbing. One of the important contributions of the Kyoto Protocol would be the extent to which it would send out a global signal in favour of lower carbon energy sources. Subsidies could mask such important market signals. WT/CTE/W/67 could also have treated the importance of developing clean coal technologies. The Clean Development Mechanism agreed in Kyoto was a potentially useful mechanism for private sector transfer of such technologies to help meet the agreed emission reduction commitments. Canada was aware of Brazil's leadership role in developing alternative, lower carbon fuels and thanked Brazil for sharing their experiences and offering to contribute a paper setting out this experience in detail.

47. The representative of Morocco referred to the fact that the Kyoto meeting of the Convention on Climate Change had not been included in the energy sector of WT/CTE/W/67, as had been noted by the EC. The Kyoto Protocol gave the international community a way of reducing greenhouse gas emissions. International trade should follow the provisions of this agreement. He noted the need for technical assistance for developing countries in the context of activities implemented jointly or bilaterally.

#### Fisheries

48. The representative of Japan said that overexploitation was one of the major problems in the fisheries sector. Conservation of fish stocks could not be achieved only by reducing subsidies given that the main cause of overexploitation was the lack of sustainable fisheries management; reducing subsidies would not always lead to sustainable fisheries. To improve the situation, all factors should be comprehensively considered and cooperation between the competent international organizations was essential. FAO was dealing with overcapacity issues and in April, FAO would hold an expert meeting on this matter. In examining trade and environment in the fisheries sector, it would be useful for the CTE to receive input from the FAO. Some subsidies positively affected marine ecosystems, for instance by restoring fishing grounds, supporting relevant research and ecologically sound technologies, and training fishermen to acquire ecological methods of fishing.

49. The representative of New Zealand proposed that, given the interest in the wider international community in this area, as illustrated in the NGO Symposium, WT/CTE/W/80 should be derestricted. He said that world fisheries were in crisis and global fish stocks overexploited. A large part of this problem was due to overcapacity, whereby too many fishermen followed too few fish. New Zealand was concerned about the trade effects of fishing subsidization which contributed to overcapacity. Fishing industry subsidies encouraged the use of fisheries resources above normal economic rates of exploitation. Inflated returns encouraged excess capacity and overfishing particularly in poorly managed fisheries. This had implications for the supply of fish to consumers and processors. These supply distortions placed downward pressures on world seafood prices. Depressed prices affected the ability of developing countries in particular to achieve economic returns from their fishery resources. In addition to competition from subsidized industries, developing countries faced tariff escalation. These trade effects were serious and should be borne in mind when examining the environmental benefits from removing fishing subsidies. New Zealand endorsed the point which had been raised, which should be examined for other sectors, was that merely removing trade distorting measures would not automatically result in environmental benefits. However, in the past decade, the international community had focused extensively on developing rules and policies designed to ensure better conservation and management of fisheries resources. There had been a number of agreements elaborated, such as the UN Agreement on Straddling and Highly Migratory Fish Stocks, as well as Codes of Conduct. But in no case did these agreements address the overcapacity problem, which was being fuelled by subsidization.

50. New Zealand would welcome contributions from the OECD and FAO on their ongoing work in this area. In APEC, Japan and New Zealand had co-sponsored a study which would include a list of the generic types of fishery subsidies, the policy objectives behind them and seek to analyse their

relationship with the WTO Agreement on Subsidies and Countervailing Measures. It was also being proposed that APEC Members would voluntarily remove all prohibitive subsidies and ensure that any non-actionable subsidies were applied in conformity with WTO rules. This proposal would be put forward to APEC Ministers in June 1998. It illustrated the recognition of the need for action in this area. New Zealand hoped Members would take voluntary steps to remove fishery subsidies because if these steps were not taken then there would be increasing pressure to resort to the provisions of the Subsidies Agreement and to dispute settlement action. WT/CTE/W/80 provided useful information on the diverse range of subsidies notified by WTO Members in this area. A few notifications identified environmental objectives as part of the rationale of a subsidy; New Zealand, for its part, would be examining the information. Although the point had been made that some subsidies could be environmentally beneficial, it was important to consider the secondary effects of some of these subsidies. If the subsidy meant that fishermen would remain active in an unsustainable fishery, this would need to be carefully examined. New Zealand would also welcome comments on its paper, WT/CTE/W/52.

51. The representative of Norway said that the most important factor in achieving sustainable fisheries was the application of resource management policies. Resource management was, however, outside the WTO's scope. As pointed out in WT/CTE/W/67, trade in fish products was affected by traditional measures, such as tariff barriers and non-tariff barriers; a variety of forms of subsidies existed in the fisheries sector, many of which had negative effects on fisheries, while others might act to reduce fishing efforts. The question of whether and how trade liberalization affected fishery resources remained unanswered in WT/CTE/W/67. All aspects of fisheries subsidies should be studied before conclusions were drawn on their effects and further work should make a clear distinction between overexploited and efficiently managed stocks. This distinction had been made in OECD studies which tended to conclude that trade liberalization would likely have only a small impact in the fisheries sector. Resource management was a more significant factor.

52. The representative of the United States said that though WT/CTE/W/67 and WT/CTE/W/80 contributed to the discussion, further work should build on New Zealand's analysis. It was clear that although the elimination of subsidies might not solve all environmental problems, the current level of expenditure of effort in the fisheries sector would not be possible without an enormous amount of subsidization. Given that the world's fisheries were in crisis, any contribution to ameliorate this problem was needed. The US agreed with Japan, Norway and New Zealand that it would be valuable to have input from other organizations, such as the FAO, OECD and the CSD, such as through Secretariat up-dates of this work or direct contributions from those organizations. At the NGO Symposium, it was noted that the WTO notification process related to fisheries subsidies was not working well. In this context, he supported the derestriction of WT/CTE/W/80.

53. The representative of Australia said WT/CTE/W/67 and WT/CTE/W/80 illustrated that the trade and environment perspective applied to the fisheries sector. This sector fitted well into the category of having significant economic policy distortions which given their nature and size had an impact on international markets. The fishing industry also had a direct and significant impact on the physical environment, which was currently of great concern with many fisheries under great pressure and stocks dwindling. Known recorded catch was above sustainable rates and unreported fishing contributed further to the problem. As WT/CTE/W/67 noted, the FAO estimated that 60 per cent of the world's conventional fish species were fully exploited, overexploited or in the process of rebuilding as a result of depletion. The FAO currently estimated that a 30 per cent reduction of world fishing capacity was needed to allow overfished stocks to recover. This situation was being driven by the distortion of the cost structure of the fishing industry by heavy subsidization. Some subsidies were aimed at improving the ecological sustainability of fishing activities. WT/CTE/W/80 noted that such subsidies were overshadowed by those that increased or maintained fishing overcapacity. Even if so-called positive subsidies aimed at environmental objectives might be justified in some circumstances, they should be carefully designed to ensure their objectives were met. The danger was that payments would find their way into the revenue streams of active fishers and promote fishing.

54. In Australia's view, WT/CTE/W/80 provided an illustration of the variety of subsidies being paid by a range of countries to fisherpeople. From the descriptions of many of these subsidies, it seemed likely that they would impact on the cost-structures and levels of activity in this industry in a variety of countries, and thereby on the marine environment. This being the case, it was important for the WTO to continue collecting information on the nature and extent of subsidization in this industry. The growing importance of fisheries trade to developing countries had been noted, with 10 of the 41 vulnerable single-commodity dependent economies reliant on seafood for at least 40 per cent of their exports. For these countries, the reconciliation of improvements in market conditions and environmental management would be especially important. Special difficulties existed for smaller, less wealthy countries with fewer resources to devote to environmental management. Capacity building might be needed if the double dividend was to be realized. Increased returns resulting from reform of international markets would also allow these countries to improve their capacity to manage fisheries.

55. The representative of the European Communities said WT/CTE/W/67 examined several elements which had an impact on the industry and on fish stocks. The key issue in sustainable resource exploitation was fisheries management, not trade. In the fisheries sector it was particularly important that trade liberalization be accompanied by sustainable resource management both at the national and international level. Fisheries was the example used to demonstrate how markets failed to integrate environmental costs and benefits. Regional fishery organizations played a key role in sustainable fisheries management. Subsidies were not inherently good or bad for fish stocks; subsidies which corrected environmental externalities were not trade distorting, whereas those which subsidized fishing directly would distort resource allocation. The EC questioned, however, the unqualified assertion in WT/CTE/W/67 that "it has been widely recognized that fishing subsidies are a major contributor to ... the mismanagement of fisheries resources". Although in some organizations it had been suggested that certain subsidies were not resource management neutral, this was did not condemn all forms of subsidies. Reference could have been made to non-tariff measures related to transit and access to ports, which could have a significant impact on resource conservation, especially when used to prevent illicit fishing. Reference could also have been made to trade measures used against countries unwilling to cooperate in the responsible management of fishery resources on the high seas.

56. The representative of Argentina thanked New Zealand and the US for their papers on the fisheries sector, which was an example of a "win-win" situation. He shared New Zealand's comment on the interest in the environmental community which had been expressed at the NGO Symposium on exploring "win-win" situations. The CTE should not miss the opportunity to advance environmental benefits with respect to further trade liberalization. It is recognized that subsidies were not the only factor acting against sustainable fisheries management. One of the main factors was open access to fisheries resources, particularly outside the 200 mile zone and for highly migratory species, or straddling stocks. Moreover, many developing countries had difficulties in negotiating and enforcing equitable access agreements to fisheries located in their Exclusive Economic Zones (EEZs) due to their low monitoring capacity and their economic situation. Given that developing countries were constrained to obtain short term benefits, sustainable resource exploitation was a luxury which many could not afford. In this scenario production subsidies provided to high sea fleets were particularly harmful, as witnessed in agriculture. Although the WTO's capacity to act to improve fisheries management was limited to its area of competence, subsidies reduction would allow for more efficient resource use which would reduce pressures on fisheries resources. The implementation of environmental and sustainable resource management policies had to go hand in hand with the elimination of government policies, such as subsidies, which contributed to resource depletion. He supported New Zealand's proposal to derestrict WT/CTE/W/80 and also considered that it would be very useful to invite other intergovernmental organizations such as OECD and FAO to contribute to the CTE discussion.

57. The representative of Korea thanked New Zealand and the US for their contributions to the fisheries sector. Korea shared the view of Japan and Norway that overcapacity and overfishing had caused serious problems for fisheries sustainability. However, there were other aspects to be considered such as resource management policies and other trade barriers. The compilation of subsidies notified by WTO Members in WT/CTE/W/80 included environment-friendly and unfriendly subsidies. There were subsidies for the "Fisheries Alternative Programme" provided to help long-term diversification of affected fishery-dependant communities or to provide employment for workers displaced by a downturn in the fishery industry; and a subsidy that took the form of tax deferrals that existed to facilitate the structural improvement of SMEs. Certain countries provided subsidies to raise fishermen's income without increasing the catch, by improving the value-added of fisheries products and the quality, processing and preservation of fish stocks. There were also subsidies for the temporary or final end to fishing and for the scrapping of fishing vessels; subsidies for vocational training were widely used. Korea had also introduced subsidies for restructuring the fisheries industry with a view to relocating fishermen to other industries. Analysis was needed to determine the net impact of subsidies on the marine environment. The distinction between diverse subsidies should be made and aggregate net impacts analysed, including both positive and negative effects, of fishery-related subsidies. Korea supported cooperation between the WTO and other relevant international organizations, such as the FAO and the CSD, to strengthen the knowledge of the CTE of these issues.

58. The representative of Canada said WT/CTE/W/67 accurately described the situation in global fisheries, particularly the threat to the sustainability of world fishery resources as a result of harvesting overcapacity and overfishing. Subsidies were identified as a major factor resulting in overcapacity while also noting that certain subsidies could have positive environmental impacts by reducing fleet capacity, restraining fishermen, enhancing fish stocks, promoting vessels and fishing license buy-backs. These were the types of subsidies which Canada supported in part to take pressure off fisheries resources. Paragraph 20 noted the contribution of eliminating trade restrictions in this sector was difficult to isolate relative to numerous other factors affecting this sector. Canada associated itself with the concerns raised with respect to fishery subsidies. However, the environmental benefits of eliminating tariff and non-tariff measures should also be noted. Barriers which supported artificially high price levels would increase import competition in the market and place downward pressure on prices. This would bring about the rationalization in the domestic industry forcing some inefficient players out of the industry and reducing the size of domestic fleets. This would have as positive an effect on harvesting capacity and resource sustainability as subsidies removal. These benefits should receive greater consideration. The figures quoted in WT/CTE/W/80 were 1992 FAO statistics on subsidies; further work was welcomed by FAO and others to update this data. Canada supported the derestriction of WT/CTE/W/80 given the interest shown by participants at the NGO Symposium.

59. The representative of Thailand, on behalf of ASEAN, would comment on WT/CTE/W/80 at a later stage.

60. The representative of Morocco said proper management of the marine environment would contribute to the protection and sustainable development of fisheries resources. According to scientific research, the world fish stocks were decreasing due to overexploitation and fishing methods used, such as drift-nets, particularly in the EEZs and the high seas. Measures to safeguard and develop fishery resources should be envisaged through the reduction and elimination of fishery subsidies to reduce the cost of capital investment in the industry. Even if eliminating these distortions would not guarantee a viable use of fisheries, it was one means to enhance sustainability. Tariff escalation was a problem for developing countries and was detrimental to the diversification of fish products and market access. Programmes to promote sustainable fishing methods and to encourage biological rest periods should be set up. Such issues were being addressed in the Law of the Sea, the Biodiversity Convention, CITES, the Agreement on the Promotion and Management of High Seas



Fishing, the Agreement on the Preservation of Migratory and Straddling Stocks, and the FAO Code of Conduct.

61. The observer of the OECD said a study was being launched on the question of government financial transfers and how they affected the transition to responsible fisheries. For the time being, the relationship between these transfers and international trade was not a subject of analysis. There were a large number of countries in the OECD Committee for Fisheries which had expressed their interest in exploring trade matters, but only after impacts on resource sustainability had been analysed. The framework for collecting information on financial transfers as part of the current OECD study would have sufficient flexibility to be used in other analyses.

62. The observer of FAO said FAO was carrying out a study on subsidies in the fisheries sector which concentrates on developing countries, as a compliment to the OECD study. Some indications of the global levels of fisheries subsidies were lower than the US\$54 billion published in 1992. There were some estimates around US\$14 billion. Between developed and developing countries, subsidies levels in developing countries were much lower and more concentrated in certain countries. She noted that in April, Japan was sponsoring a technical working group on fishing overcapacity and in June the FAO Committee on Fisheries was organizing a meeting on fish trade where issues including trade and environment would be addressed.

63. Concerning the derestriction of WT/CTE/W/80, the Secretariat said that the fact that NGOs had had access to WT/CTE/W/67 had given them a clear indication of the relevance of CTE work and the extent to which many of the issues which concerned them were being taken up during the course of the deliberations of the CTE. Many NGOs had begun to realize that the WTO had a role to play in, for example, furthering trade liberalization in specific sectors.

64. The Chairman invited those delegations who had indicated they would need to consult with their capital on the derestriction of WT/CTE/W/80 to inform him of the outcome of their consultations.

#### Forestry

65. The representative of Canada presented his delegation's paper highlighting Canada's national experience with respect to certification, standards and labelling in the forestry sector, WT/CTE/W/81-G/TBT/W/61. This paper had benefitted from consultations in Canada, not only with respect to the federal government departments concerned, but also all of the groups that had developed the approaches discussed in the paper. It was issued under the responsibility of the Canadian Government but Canada would be remiss not to acknowledge the extremely valuable contributions made by those outside the government. The paper was found useful in Canada to refine its understanding and thinking regarding the various approaches, which reinforced Canada's conviction that the CTE could play an important role in domestic policy coordination. To facilitate further discussion of this paper in Canada and elsewhere, it had been issued as unrestricted; it had been issued as a joint CTE-TBT paper given that it focused on standards and labelling issues which fell under the TBT Agreement. Canada requested that this statement be provided to the TBT Committee for inclusion in its minutes. Canada welcomed the EC's interest in mainstreaming environment in the WTO and looked forward to more active discussion of standards and labelling issues in the TBT Committee.

66. Forests and forests products were a leading edge sector where the trade and sustainable development issues were issues with which government, industry, and wider civil society had to grapple. These issues were not theoretical, but of real environmental, economic and social impact. The debate had underlined that sustainable resource management practices reinforced both environmental and economic objectives. Canada's forests were 10 per cent of the world's forests, an area almost twice as large as the EU, covering approximately one-half of Canada. Forests with commercial potential were approximately 50 per cent of Canada's total forests. The forest products

sector was the largest net contributor to Canada's trade balance, with exports of approximately US\$30 billion in 1996. Direct employment was approximately 300,000, which included significant employment in rural areas. In contrast to many countries, where the forests were largely owned by private citizens or companies, 94 per cent of Canada's forests were owned by governments, mainly at the provincial level.

67. Canada's forest policies had evolved, reflecting the evolution of views of the country's seemingly endless forests in the past. From initially viewing forests as an economic resource, forests were now viewed through the full range of environmental, social, cultural, and economic values. Sustainable forest management (SFM) was thus broader than environmental considerations and was the basis for Canada's regulatory framework. The Canadian Council of Forest Ministers, regrouping the federal and provincial Ministers responsible for forests, developed the national strategy for sustainable forest management. Regulations were set at mostly the provincial level. The strategy was developed through a broad national consultative process, involving the participation of the wide range of members of society that were interested in SFM issues. The second national strategy would be released shortly to further refine the original strategy's objective to ensure that Canada's approach to SFM included a range of both timber and non-timber values, while protecting the integrity, health and diversity of Canada's forest ecosystems. National Criteria and Indicators were developed through a similar open and inclusive process. Canada's criteria were consistent with the Montreal process. The indicators reflected the unique features of Canada's forests, and incorporated a wide array of forest values. There was no single internationally agreed definition of SFM. An international definition would be beneficial to improved forest management as well as reducing the possibility of trade barriers. Canada supported an international convention on forests that could include such a definition of SFM.

68. Within this general policy context of SFM, a number of voluntary instruments had been developed to respond to customer interests on resource management and product production aspects of lumber and paper production. Certification standards or schemes pertained to the forest management phase while labelling programmes generally focused more on the production phase. As such, these instruments only captured part of the life-cycle of forest products and should be viewed in that context. Some general issues were important to keep in mind in considering these approaches, including: (a) the development process; (b) auditing processes; (c) reference to national regulation; (d) methodologies; and (e) equivalency. ISO 14001 was the international environmental management system (EMS) standard that was familiar to all and which could be applied to both resource management and production phases. Certification could either be "pure" certification in that it only dealt with how a particular forest was managed without any chain of custody tracking to the final consumer. The Canadian Standards Association, CSA-Z808/9-96: A Sustainable Forest Management Certification System, followed this approach. The alternate approach was that of the Forest Stewardship Council (FSC) which was a product certification system that used chain of custody to label products that were managed according to the FSC Principles and Criteria. The two main types of eco-labels were Type III "report card" labels, such as the Environmental Profile Data Sheet and Type I single mark eco-labels, familiar to the CTE from earlier discussions, which included such programmes as Environmental Choice.

69. The ISO 14001 EMS Standard took a system approach aimed at integrating environmental policy considerations into general firm management. ISO 14001 specified the process that an organization had to follow in order that its management system applied to environmental concerns. The ISO 14001 series was developed through the same systematic approach to building consensus as other international standards. In addition to the 70 national standardizing bodies, a large number of liaison organizations, including NGOs, had also participated in the development process, reflecting the perceived broader public policy potential impact of ISO 14000. A multi-stakeholder Canadian Advisory Committee had formulated the Canadian position to ISO. ISO 14001 did not establish performance measures, nor prescriptive approaches on how to achieve performance targets. These were provided by the national regulatory framework under which an organization operated. Industry

generally preferred this approach as it provided considerable flexibility in terms of how to meet national regulations through the application of continual improvement. A forest company might implement ISO 14001 in its pulp mill and saw mills. Its corporate environmental policy might also included a commitment on its forest management operations. The company could choose to implement ISO 14001 on its forest management operations, or it could choose to implement the more stringent CSA-Z808/9 standard. Internationally, ISO Working Group 2 had developed a draft bridging document to facilitate implementation and use of ISO 14001 by forest organizations. ISO 14001 was generally favoured by large companies as a management tool to improve environmental performance or minimize environmental liabilities. Organizations were not allowed to label their products "ISO 14001".

70. The CSA Sustainable Forest Certification System Standard was developed by the Canadian Standards Association, one of the four national standards development organizations mandated by the Standards Council of Canada. The standard was developed through a multi-stakeholder process that included auditors and academics, producers, general interest and government. Such inclusive approaches were central to the credibility of voluntary standards. The standard was based on the management systems approach of ISO 14001, including continual improvement. However, it was also a performance standard in certain key respects. Performance aspects of the standard included reference to the Canadian Criteria and Indicators and the specific requirements for public consultation and input. It was thus ISO 14001 "plus". The auditing process similarly reviewed both systems and field performance measures. The major cost was not certification by an external auditor, but rather the indirect and direct costs to the company of developing and operationalizing the management system. It had been estimated that approximately 200,000 square kilometres was in the process of certification. This was an area approximately 80 per cent of the United Kingdom. The first certification was expected by 1999. Although the CSA standard applied to a specific forest, no CSA labelling of products coming from that forest was permitted. Thus, issues related to chain of custody, particularly problematic for paper production, did not arise. The CSA standard was generally supported by industry given that the standard was developed by a national standards development organization; its general preference was for the greater flexibility of management system approaches in reaching performance targets.

71. The Forest Stewardship Council had been developed by a variety of NGOs, buyers of wood products and certifiers. Producers were not significantly represented in the development process. It took more of a performance standards approach - i.e. do's and don'ts - to forestry management rather than a management systems approach. In contrast to normal certification processes, certifiers interpreted the general Principles and Criteria rather than certifying that specific standards had been adhered to. The development of regional standards was, as acknowledged by the FSC itself, designed to remove what many considered to create possible conflicts of interest for certifiers. In Canada, no forests were yet being certified to FSC. Worldwide, the FSC stated that 80,000 square kilometres had been certified, an area the size of Austria. The chain of custody approach of the FSC was more suited to lumber production than paper, given that paper mills typically source their fibre from a variety of sources. Thus tracking of these sources, and segregation of certified and non-certified fibre, was more problematic for large-scale producers. The FSC was more demand driven than other approaches, given the formation of buyers' groups that required FSC or equivalent certification. As noted in the NGO Symposium by several NGOs, the FSC was viewed as the approach to SFM certification rather than other evidence of well-managed forests.

72. The Environmental Profile Data Sheet (EPDS) was developed by the Canadian Pulp and Paper Association as a means of responding to customer concerns regarding the life-cycle environmental attributes of pulp and paper. Developed through a multi-stakeholder process, the EPDS was a voluntary, standardized and third party reporting form that was similar in approach to nutritional labelling. Given the nature of the detailed information, the EPDS was designed for large, sophisticated industrial customers that had the in-house capability to compare the environmental performance of suppliers. It was not designed for the retail level. The EPDS provided customers with

detailed information regarding forest management, fibre use, efficiency and source, energy and water use, liquid effluent, solid waste and air emissions. This data allowed customers to compare suppliers with respect to the environmental attributes they judged most important. Customers, not third parties, determined which criteria were important, and what thresholds were important. Moreover, the main use of the EPDS would likely be by firms who considered themselves environmental leaders and who sought an objective and credible means to communicate this leadership. This flexible approach to selectivity made "report card" environmental labels such as EPDS more attractive to industry as they were not prescriptive, but effectively left decisions to customers. The EPDS, by providing third party verified detailed information, provided firms with the data and measurements that could be used as the basis for continual improvement. The preparation of the EPDS required close monitoring of operation in order to generate the data; this process often identified particular parts of their processes where improvement was possible and economically advantageous.

73. Environmental Choice was the Canadian national eco-labelling programme. Although delivered by a private company, Terrachoice, the policy responsibility and oversight rested with Environment Canada. Environmental Choice affixed its symbol to products that it had determined as environmentally preferable. Criteria used by Environmental Choice had been established through a multi-stakeholder consultative process. Labelling criteria were published semi-annually in the Canada Gazette and were subject to a 60 day prior comment period. Criteria were reviewed every 3 years to ensure that they remained up to date. Single-mark eco-labels were aimed at the retail level, where the consumer generally preferred a simple, recognizable mark that a product was environmentally preferable to other comparable products. In contrast to report card environmental labels, which simply reported the values of individual criteria. Type I eco-labels ranked products within each criteria, set thresholds or hurdles for each criteria, and applied weighting to all criteria, in order to identify the 20-30 per cent of products that were environmentally preferable overall. Customers decided on the basis of this third party assessment of the overall environmental preferability of the product, rather than making this assessment themselves. In contrast to most other eco-labelling programmes, Environmental Choice considered using equivalent test data for the test methods specified in its product guidelines. This had been applied in the case of foreign suppliers where regulatory requirements differed from Canadian regulatory requirements, but the product was judged as being as environmentally preferable in relation to Canadian products. Environmental Choice followed the procedural and substantive provisions of the TBT Code of Good Practice. Its consideration of equivalency went beyond current Code of Good Practice provisions.

74. An example of private eco-labelling could be seen in the Xerox photocopying paper used in the WTO. Xerox, like most large multinationals, had an environmental policy with an in-house capacity to evaluate the environmental attributes of its suppliers. Private environmental policies reflected both corporate objectives of a positive corporate image and environmental performance improvements, as well as the general public environmental policy of the region in which the company was supplier. Thus, Xerox Europe labelled its photocopying paper as "100 per cent Chlorine Free bleached." The level of AOX (Absorbable organic halogens) was set at 0; the pulp was sourced from cultivated forests only (i.e., no old growth harvesting); and the product and packaging were 100 per cent recyclable. Environment Canada had considered and rejected regulations regarding AOX, given other measures that were deemed more relevant, and that SFM was also applied to areas which included old-growth trees. This private label favoured local regulatory requirements and production practices, with a real trade impact.

75. Based upon Canada's experience with the above approaches, the following policy considerations and issues were relevant to all. The following two procedural aspects were critical to reducing trade concerns. First, an open and transparent development process provided assurance to all stakeholders that the results reflected a balance of interests. Multi-stakeholder input facilitated reaching national consensus. National standards systems generally provided a systematic approach to securing consensus from all stakeholders. Publication of work programmes and comment periods provided needed transparency for comment for both domestic and foreign interested parties.

Secondly, credible, impartial audit processes were crucial to all approaches. This required that standards be as clear, precise and consistent in application as possible, and that the auditing function be distinct from consulting or other management services.

76. First, with respect to substantive aspects, all approaches required adherence to the national regulatory framework. In Canada, this meant both federal and provincial regulations. Secondly, given that life-cycle approaches were still at a relatively early stage, there was scope for convergence with respect to the basic methodology. The Canadian Criteria and Indicators provided the basis for a common framework for certification given that these represented national consensus and the guidance they provided with respect to those criteria and indicators of importance to forest management. With respect to environmental labelling, there was potential for common criteria between Type I and Type III labels, and thus a common data set that could be used to set selectivity. Convergence of criteria in labelling could reinforce the credibility of both labelling approaches given that Type I was targeted to retail customers and Type III industrial customers. Certification might also become a criteria in environmental labelling programmes. However, market-based forces should play their part in determining the level of diversity and complementarity/integration of each instrument. Thirdly, as all of these approaches related primarily to process and production methods rather than final characteristics of products, equivalency between approaches and systems was particularly important. With respect to sustainable forest management, buyers that set requirements should, in principle, accept that different national SFM standards and approaches existed. Similarly, Type I eco-labelling programmes needed to take into account different regulatory frameworks that impacted upon process or production methods. Trade problems would be reduced if all approaches took into account local forest management conditions and production regulatory requirements in producing countries.

77. The efforts expanded by governments, industry and other members of civil society indicated the degree to which these issues were perceived as being of immediate and longer-term impact. The trade concern can be seen in the following example. The combination of elimination of tariff escalation on paper products between the USA and Canada and structural changes in industry resulted in a dramatic absolute and relative growth of other paper exports, compared to the commodity exports of pulp and newsprint. While each market was different, and structural factors would play different roles, Canada sought and obtained zero for zero in paper products in the expectation that Canadian producers could compete in more than commodity pulp and newsprint exports. Given the impact that certification, standards and labels could have on market access, there was a real concern that requirements for some of these instruments could undermine the market access negotiated in key markets. It was important to note that the issue was not SFM or good environmental practices. These were shared values that Canada was committed to achieving, in keeping with their broad sustainable development objectives. The issue, in the trade policy context, was to ensure that all approaches did not discriminate against Canadian or internationally developed processes that addressed important and legitimate resource management and process and production issues. While the forest products sector might be unique in how it had been confronted by trade and environment issues, issues related to standards and labelling approaches likely had parallels in other sectors. This had been illustrated by Colombia's contribution on its flower sector. The policy considerations Canada had derived from their forestry experience appeared to be horizontal in nature. Canada hoped that other Members could similarly share their national experiences in dealing with these and similar issues to further understand the trade implications of the various approaches and instruments.

78. The representative of the European Communities said that the forestry section might usefully have been entitled "The Forestry Sector" to clearly include forest resources and downstream processing industries. This section could have gained from more specific examples to support the general arguments put forward. Deforestation had little to do with international trade directly and more to do with expanding demand for food, land tenure patterns, expansion of subsistence agriculture, and demand for fuel wood. Nevertheless, it was important to recognize the indirect, initiating effect of even selective logging, which could be fundamental in triggering other causative agents, especially when concentrated locally. Although overall figures for the percentage of

roundwood from developing countries entering trade might be low, these statistics masked the situation in individual countries where trade in forest products might be economically important and the follow-on effects of trade-related logging.

79. The representative of the EC said that many references had been made at the NGO Symposium to the importance of correct resource pricing. In the case of wood, the basic premise of WT/CTE/W/67 was that "in well-functioning market-based economies, prices register the relative scarcity of resources and consumer preferences" did not always apply. The document did not distinguish between national stumpage values set by governments, often for natural or semi-natural forest resources, and the growing costs incurred by private forest owners. Price mechanisms were unable to register wood's scarcity or account for non-wood services, including its value for carbon storage. The long period between the production and harvesting of wood meant the wood production period might exceed the time horizon of private owners or even some governments. As a result, some countries had established compulsory forest regimes to prevent land from being cleared and used for the most profitable purpose in the short term. A high proportion of benefits from forests were non-wood, many were public goods and some forest services were global, such as regulating climate or maintaining biodiversity. It was important to bear in mind that, for forest resources, prices could not reflect their optimal use as some of the benefits which arose did not accrue to private owners, the present generation or solely to the country where the forest resources were situated. Such benefits were difficult to quantify in market terms. When examining the role of forestry subsidies, different steps in the wood production and processing chain should be distinguished. Subsidies related to products "closer to the market", such as in the furniture industry, might be more distorting than those for forestry measures related to the wood production which might be granted 50-100 years before the wood was marketed. A distinction also had to be made regarding subsidies granted for social amenity or environmental reasons which might have only limited or localized distortional effects, but which might be justified by the non-market benefits accruing.

80. In the EC's view, reference to tariff peaks in the document had not been substantiated and it was difficult to know to which countries this referred. The reductions in tariffs cited did not accord with the claims about tariff escalation made elsewhere in the document, particularly for the EC where paper tariffs were being phased out over 10 years, while those for wood products persisted at lower rates than before the Uruguay Round. Although the FAO report quoted on trade in forest products was still based on (loose) estimates, the analysis did not distinguish trade increases due to liberalization from those driven by other factors such as increasing wealth, literacy, press freedom, hygiene standards and industrialization, especially computerization. It would have been useful to examine the effect of import restrictions on environmental technologies which could contribute to reducing energy consumption by, and pollution from forest-based industries.

81. According to the EC, although certification of sustainable forest management and the labelling of forest products were complementary to forest management, schemes of this nature necessarily did not necessarily create uncertainty or additional costs for exporters, nor did they constitute trade barriers. The principles for certification schemes agreed by the Intergovernmental Panel on Forests (IPF) were designed to ensure that they did not. The IPF principles called for open access, non-discrimination, credibility, non-deceptiveness, cost-effectiveness, participation of all interested parties, sustainable forest management, and transparency. It was important to examine how and under which conditions certification and labelling could contribute to alleviating market failures in forestry, for example when sustainably produced wood was in competition with wood exploited from natural resources without consideration to the natural rate of regeneration. The IPF guidelines were a useful reference. It would have also been appropriate to look at conditions required to make trade and environment mutually supportive and to emphasize the contribution MEAs could make to this end.

82. The representative of New Zealand thanked Canada for contributing its national experience in the forestry sector. As a major exporter of forest products, New Zealand had faced a similar range of

challenges to trade in forest products as those indicated by Canada. It was important to stress the need for environmental standards and schemes, such as those outlined in Canada's paper to be voluntary, transparent and market based. The involvement of all relevant parties in developing these instruments was fundamental. A number of New Zealand forestry firms were working towards complying with the ISO 14000 standards; to date, two had been certified. He drew attention to the reference in paragraph 51 of WT/CTE/W/81 to the recent formation of buyer groups which had a policy to only purchase certain certified products. The paper submitted by Colombia on eco-labelling highlighted similar concerns. New Zealand was concerned that these groups could distort markets and impact negatively and unfairly on the access of some exporting countries. There were various tools to alleviate problems in this area such as equivalency, which was an issue which would be explored further in the TBT Committee as part of the TBT Triennial Review work programme. It would be valuable to examine issues such as those raised by Canada in the context of achieving compatibility between Types I and III eco-labels. New Zealand would welcome hearing from others who had had to face similar challenges in the eco-labelling area.

83. The representative of Switzerland thanked Canada for its contribution which would help to better understand the challenges posed in the forestry sector. The analysis in WT/CTE/W/67 was lacking in the forestry section. The complexity of the impact of measures such as subsidies or certification of forestry products was such that it was difficult to formulate conclusions. The assertion in paragraph 123 that the net growth of income per capita would lead to environmental benefits had not been developed. This proposition was only valid if additional income was invested in forest management, which would only be the case if national policies for sustainable forestry management were implemented and the necessary financial means were provided to ensure implementation. The direct impact of the elimination of trade distortions on environmental quality was limited, particularly for already low tariffs.

84. The representative of Japan said that trade liberalization in the forestry sector had the potential to result in environmental degradation if forests were not managed appropriately. WT/CTE/W/67 argued that if adverse production and consumption externalities were adequately integrated into the decision making process, trade and environmental objectives were mutually supportive. However, in many cases, externalities had not been considered in policymaking, which revealed that the simplified policy of removing subsidies and other so called "trade distorting measures" could cause negative environmental impacts. Market and price mechanisms did not always contribute to environmental conservation. The figure on page 59 was too optimistic; the assumption indicated that the level of logging was below the sustainable level, with the demand curve shifting right in response to a rise in demand. WT/CTE/W/67 noted that an increase in wood production increased incomes which, in turn, led to conservation and that, therefore, trade liberalization was necessary; this was not necessarily correct. Conflicts on forestry including between developed and developing countries were arising from logging of natural forests. Many cases existed in which it could not be expected that increased logging would consider the scarcity of forestry resources. The CTE should pay more attention to this feature of natural forests. Although paragraphs 113 and 114 noted that removing tariff escalation could contribute to environmental improvement, even with the implementation of advanced processing in exporting countries, excessive logging in response to market demand might lead to overexploitation in the absence of sustainable forest management policy. There was no empirical justification concerning the linkages between abolishing tariff escalation and forest conservation.

85. Japan's imports of wood were as high as 80 per cent of total domestic wood consumption. Timber trade had invited severe criticism from many environmentalists. Forests played a significant role in the environment of each country and region in terms of conservation of biodiversity, land and water resources, and landscape, particularly in countries where forests accounted for a large share of total land. Importing country environments and not only that in exporting countries had to be considered. WT/CTE/W/67 quoted from an OECD report by Barbier and a book by Gillis and Repetto, but failed to include the arguments they contained on the low recovery rate in the plywood

industries in tropical wood exporting countries, a sector which was protected by export restrictions. This caused an inefficient use of tropical timber. The references to the adverse environmental effects of export restrictions described in these studies were not noted in WT/CTE/W/67. Paragraph 114 read as if industries in importing countries were inefficient and the logic on export controls, which contradicted Barbier and Repetto. Concerning the proposal in paragraph 119, quotas were already prohibited by the WTO. Paragraph 127 referred to the issue of formaldehyde glue, which plywood manufacturers were using less of given its negative effects on human health. The formaldehyde issue had nothing to do with import regulations. Japan would submit written comments with its suggested revisions. He referred to the international processes to define criteria and indicators for sustainable forest management, such as the Montreal process and in the ITTO. Criteria and indicators would vary from country to country reflecting differences in environmental and social conditions. These difference should be as small as possible; this was important from a trade viewpoint. Implementation of criteria and indicators should be transparent. The CTE should contribute to the implementation of criteria and indicators.

86. The representative of Australia noted the reference in the forestry section of WT/CTE/W/67 to the significance of wood fuel production to forestry as a whole. The document cross referenced this to references to wood fuel in the energy section and the possible impact of reform of energy market distortions on wood fuel logging. This illustrated the many cross sectoral linkages, which related to the overall linkages between economic and environmental factors. Four main types of policies warranted examination in relation to the forestry sector. The first of these was tariff escalation. While the differential between tariffs on raw logs and those on processed wood products was being reduced significantly by the Uruguay Round tariff commitments, there were still important degrees of tariff escalation in relation to some wood products and furniture. From an environmental view, this was important as tariff escalation could reduce the trade revenues gained by countries dependent on forestry exports and limit their opportunities to diversify production. Canada's paper had noted the effects of the elimination of tariff escalation between Canada and the U.S. and the contribution this had made to industrial changes in relation to pulp processing, which had economic and environmental benefits. A second set of policies were export restrictions, which might be aimed at addressing forestry conservation concerns or encouraging domestic processing industries. An important question was the extent to which such trade measures were effective in promoting good environmental outcomes. A third set of interventions concerned the levying of stumpage fees and charges on timber cutting. The extent to which such fees were levied might not only affect the trade competitiveness of different sources of timber supply, but also the ability of governments to finance adequate resource management regimes. Inadequate fees might also encourage excessive timber-cutting through failing to reflect the true environmental value of timber resources. A fourth set of policies and measures consisted of initiatives aimed at influencing consumer markets and demand, including eco-labelling schemes or recycled content requirements. While the intention was to harness consumer buying power in promoting improved environmental outcomes, these measures raised issues on their effectiveness, trade impacts and whether they could be designed to adequately take account of differences in individual country circumstances.

87. In Australia's view, a number of major concerns had been raised about the environmental and trade effects of all four sets of interventions. There were clearly significant distortions in the timber and wood products' markets and there would seem to be considerable scope to improve the workings of these markets. A key objective for the CTE should be to identify multilateral reform efforts on issues such as tariff escalation or remaining tariff peaks, which would provide a more supportive international framework for achieving more sustainable forestry outcomes. Clearly, other policy reforms and well targeted domestic environmental policies would be needed to move towards more sustainable forestry practices. Australia would comment on Canada's paper, which was useful in advancing understanding of certification and labelling approaches, at a future meeting. Australia hoped others would similarly contribute their national experiences, including the details of programmes and practices to market access changes and environmental impacts.



88. The representative of Malaysia, on behalf of ASEAN, said that WT/CTE/W/67 set out the various trade restrictions and distortions in the forestry sector. Continued tariff escalation and tariff peaks on forestry products in some importing countries acted as a deterrent to producer countries, particularly developing countries, in their efforts to diversify into higher value-added forestry products, and could have downside effects on forestry conservation and management. Forestry had a multifarious role in the economic development of developing countries. ASEAN saw the need for the existence of export controls in this sector to help reduce pressures to harvest forests. Certification should be tied to technology transfer, including in areas such as R&D and concerning greater opportunities to study environmental economics and forestry management. The increasing array of approaches to forest certification also had to be addressed.

89. ASEAN thanked Canada for its national contribution. Important as forest conservation was to the discussions of the CTE, Members should be careful not to exaggerate the environmental benefits of trade liberalization. Given the absence of an internationally agreed definition of sustainable forest management, efforts to ensure that forestry products were only from sustainably managed forests could lead to negative market access effects. It could also result in the increased use of substitutes such as plastics, and aluminium whose production, use and re-use, and disposal also had environmental implications. ASEAN expressed its concern on the recent initiative of the Dutch Government to label forestry products. Although, this regulation was applicable to all types of timber products, ASEAN felt it was not trade-neutral. In this respect, ASEAN would appreciate clarification from the EC.

90. The representative of the United States appreciated Canada's presentation of its national experience as a way to bring as much relevance as possible to CTE work. Deforestation whether spurred by subsidies removal or international trade activities, however indirectly, contributed to climate change. Regardless of the perceived minimal effects of subsidies on trade, as suggested in WT/CTE/W/67, any contribution to climate change should be considered significant. Paragraphs 74 and 123 had not sufficiently stressed the significance of increased deforestation, it was not certain that the direct or indirect trade effects of removing subsidies, however necessary, were as minimal as suggested.

91. The representative of India said that in India the forestry sector was generally characterized in terms of its use for fuel by a large part of the population, especially those living below the poverty line. India agreed with the statement in paragraph 123 of WT/CTE/W/67 that deforestation had little to do with international trade and that competent relevant international organizations were dealing with this matter. Since there was little link between deforestation and trade, any proposal for having the CTE formulate criteria on sustainable forestry management should not be considered in the WTO; this should be done by other relevant international fora. He thanked Canada for its contribution which illustrated Canada's national experience in forestry and was of educational value to the CTE. On footnote 1 of the paper, India did not share Canada's interpretation that eco-labelling based on non-product-related PPMs was covered by the TBT Agreement. India was interested in the description of the development of certification programmes for Canada's forestry sector based on environmental considerations and would be interested to know more on how Type I eco-labels accommodated evolutions in the production phase related to changes in technology which took place in less than three years. He asked how comments received on the proposed criteria were taken into account, and if the source of comments which were not accepted were provided with an explanation.

92. The representative of Egypt thanked Canada for its contribution. As noted by India, the issue of the applicability of the TBT Agreement referred to in footnote 1 of Canada's paper was controversial. Egypt did not agree that non-product-related labelling was covered by the TBT Agreement. The reasons for this were the lack of explicit reference to eco-labelling; the incompatibility of TBT definitions on technical regulations and standards to most eco-labelling programmes; and the fact that the TBT Agreement did not cover non-product-related PPMs.

93. The representative of Ecuador said deforestation occurred as a result of poverty and based on the fact that forests were not correctly valued. The price of raw tropical timber was significantly lower than for processed tropical timber products. Although trade was not a cause of deforestation, it could provide a means to address deforestation problems.

94. The representative of Canada said that, although the message of the graphic on page 59 of WT/CTE/W/67 was correct, the forest management economics it portrayed were oversimplified.

95. The observer of FAO noted the variations in interpretations on forestry issues, including the links between trade and environment. The FAO was carrying out work in related areas and welcomed the opportunity to cooperate with the WTO where appropriate.

#### Non-ferrous metals

96. The representative of Canada said WT/CTE/W/67 was useful in setting out the non-ferrous metals sector. She emphasized the environmental benefits of a level playing field in this sector in terms of removing subsidies, tariff and non-tariff measures. There were economic and environmental benefits of recycling non-ferrous metals including trade in recyclables. Many countries will require increasing amounts of non-ferrous metal commodities to enable them to develop infrastructure to support modernization, particularly developing countries. Recycling materials can play an important role in making these commodities available at reasonable prices. In this light, trade measures, whether domestic or multilateral, which distorted trade in recyclables would have negative economic impacts and frustrate the development of the recycling industry. This could have a significant negative environmental impact.

#### Textiles and clothing

97. The representative of India said paragraph 174 of WT/CTE/W/67 correctly characterized the quantitative restrictions maintained under the MFA as a significant trade distortion in this sector, which had a major impact on developing country exports. For developing countries which depended on textiles and clothing exports, such distortions had direct impacts on their attempt to benefit from trade liberalization and devote more resources to development, leading to environmental problems brought about by lower living standards. Restrictions on the acquisition of environmentally sound technology, due to resource and protection constraints on technology transfer added to the problem. Environmental requirements, such as labels on imports of textile and clothing products from developing countries, were another trade barrier, which India would refer to under Item 3(b). As noted in paragraphs 175-176, the phase out of the MFA posed further problems, since the removal of quantitative restrictions had been limited to a few items, with the bulk of these restrictions still to be removed at the end of the transition period. Ensuing environment benefits from MFA phase out, noted in paragraph 179, would not occur until 2005, at the earliest. Until then, developing countries had to wait for the general welfare benefits noted in paragraphs 180 and 181. On paragraphs 182 and 184, textiles and clothing trade was not limited to cotton fibres; the analysis might explore the use of other fibres, including manmade fibres. In such a broader debate, environmental impacts would have to take into account both the production and final disposal of textile and clothing products. As in other sectors, discussion should also address the impact of any suggested environment-related action for developing country SMEs, especially for the transfer of environmentally sound technology on commercially viable terms.

98. The representative of the European Communities said that WT/CTE/W/67 provided a basis for the discussion on textiles and clothing. The document referred mainly to cotton; the inclusion of synthetic fibres and wool would have resulted in a broader and more balanced coverage. The analysis appeared to underestimate developing countries share of world textiles trade as it measured trade by value rather than volume, which was of interest from an environmental perspective. Given that the dyeing and chemical finish of products were the most important individual factors in this sector which

had an environmental impact, the document could have devoted greater attention to this aspect. Liberalization in this sector had not yet resulted in an increased use in developing countries of environmentally friendly technologies, which was an element which should be examined further.

99. The representative of the United States said the textiles and clothing industry could be environmentally stressful. This was not a reason to suggest that liberalization should not occur, but it was useful to flag for policymakers that as liberalization was occurring there may be a need for complementary measures to ensure that the environment did not suffer as a result. The US was perplexed by the suggestion in paragraph 186 that the phase out of the MFA would lead to production based on comparative advantage instead of trade restrictions. Certainly the MFA phase out would result in the elimination of an important category of restrictions, but as stated in paragraph 180, relatively high tariffs would still remain particularly in developing countries, which were becoming increasingly important markets for textiles and clothing products. This was an issue particularly for SMEs. The document could have usefully examined non-tariff measures such as import licensing and prohibitions.

100. The representative of Egypt asked the Secretariat to provide information on the ratio of output per cent for natural fibres like cotton as opposed to synthetic fibres in the overall world production of textiles and clothing. It was very important not to blow this issue out of proportion by concentrating on the environmental effects resulting from the methods applied only for cotton production. Egypt depended heavily on production of cotton as an export commodity. Without technical assistance and cooperation to support its policies to switch to environmentally friendly technology, removing subsidies would be detrimental to this sector of Egypt's economy. He referred to paragraph 6 of WT/CTE/W/67 and the 1996 Report of the CTE concerning the wide agreement concerning the close linkage between poverty and environmental degradation.

101. The representative of Indonesia, on behalf of ASEAN, attached importance to the relationship between textile and clothing trade and the environment. The data provided in WT/CTE/W/67 noted the importance of textile and clothing for developing countries as illustrated by the increasing share of production in total domestic manufacturing output. He agreed with the view in paragraph 170 that this sector had for many years been heavily influenced by numerous trade distortions. Removing high tariffs would enable developing countries to earn the necessary capital to allocate resources to the most efficient use and to the most environmentally sound technology. Most developing countries textile producers were SMEs and without the capital generated from increased exports, they would face difficulties in complying with environmental standards. Paragraph 179 reflected the need to phase out the MFA, which was one way of removing trade distortions in this sector and ensuring environmental benefits. ASEAN agreed with this view since the removal of trade distortions would lead to industrial restructuring and new investment would provide the possibility to introduce more environmentally sound production processes and machinery. He noted the importance of the transfer of environmentally sound technology to developing countries. ASEAN felt that trade restrictions hampered developing country capability to produce environmentally friendly textiles and clothing products.

102. The representative of Hong Kong, China shared the views of India, Egypt and ASEAN, particularly on the opportunity for "win-win" situations in the textiles sector. It was necessary to address tariff peaks in this sector. Paragraph 177 of WT/CTE/W/67 noted the high tariff rates maintained by textile and clothing importing countries, which were three times higher than other industrial products. To the extent that there may be an occasion to tackle industrial tariffs in broad based negotiations, textile tariffs by importing Members should be addressed. In the case of textiles, there was a double trade restriction given that this sector was also subject to quantitative restrictions. There were tariff peaks in importing countries which were higher than those maintained by certain exporting countries. Pages 47 to 49 provided a list of trade restrictions on trade and investment in the textiles and clothing sector. However, mention was not made of the use of governments of certain trade measures which were less visible than quotas, tariffs or subsidies, but which had similarly

adverse effects on investment. Such measures may incur changes in rules of origin which created added trade barriers in this sector. This had an impact on trade flows and created uncertainty for exporters, thereby adversely affecting investment. Investment was an important issue as the use of more environmentally sound technologies had not been evident following the liberalization of textile trade.

103. The representative of Hong Kong, China asked to what extent had liberalization in textile trade been achieved since 1995. In so far as there existed trade uncertainties which could create investment risks, the opportunity to invest in the latest technology in the textiles sector had not been used. Paragraph 167 of WT/CTE/W/67 noted the significant structural changes which this sector had undergone for over three decades. A proactive government role was warranted, particularly in importing countries, to facilitate continuous industrial adjustment and the adoption of more environmentally sound technology in this sector not only for the economic health of the industry but also to improve environmental quality. There had been a lack of enthusiasm on the part of some importing Members to pursue the adjustment issue, although this issue had often been raised.

104. The representative of Pakistan said paragraphs 172 and 173 of WT/CTE/W/67 implied that quotas under the MFA might have had a beneficial effect. While quantitative restrictions on textiles had not affected every country to the same extent, even a partial list would include the following costs: limitation of competitive exports, transfer of resources to less efficient lines of production, discouragement and distortion of investment, and quota rents. The literature on textiles trade was replete with examples of the quantified costs of quotas for importers and exporters. He said the estimated costs of the net welfare costs of MFA for importing countries ranged from US\$2.4 billion to 14.8 billion. Whereas estimates to exporting countries in terms of their foregone export revenues were estimated to be US\$5.8-6 billion per annum. Quantitative restrictions on textiles had led to misallocation of resources and loss of economic welfare in both importing and exporting countries.

#### Leather

105. The representative of Brazil noted that the leather section in WT/CTE/W/67 was presented in a satisfactory way. Trade liberalization in this sector could result in environmental benefits for all countries, including Brazil. In addition to the points raised in WT/CTE/W/67, trade liberalization could lead to the diffusion of cleaner technologies throughout the different stages of leather manufacturing in exporting countries. It could also lead to innovation in end-of-pipe technologies for the treatment of industrial residuals. The increase in economic and financial resources resulting from liberalization may also yield resources for environmental investment. At the same time, the growth of tax paying companies may allow Governments to better allocate resources. As noted in the section on environmental services, the market was expanding for environmental goods and services in developing countries. The Brazilian leather private sector noted that UNIDO and UNEP had established a National Cleaner Production Centre in Porto Alegre, Brazil, which would benefit the development of Brazil's leather industry, particularly SMEs.

106. The representative of India said this sector should be discussed further, keeping in mind the need to examine the impact of non-tariff measures on developing countries, noted in paragraph 195 of WT/CTE/W/67. He noted the environmental impact of trade liberalization in the leather industry, including the increased costs for developing country producers, especially SMEs, noted in paragraph 200. A related issue was the easy facilitation of the transfer of environmentally sound technology for SMEs to enable them to lessen the environmental impact of production.

#### Environmental services

107. The representative of the European Communities said that his delegation had given some thought to the relationship between trade and environment, particularly on achieving environmental benefits, much of which was reflected in WT/CTE/W/67/Add.1. Attention to environmental issues,

which were increasingly important in international affairs, was one of the keys to measuring further economic progress and success not only in the WTO but in any international or domestic initiative. The CTE should analyse how to achieve concrete and credible results in this respect. There was something to be said for looking at the way in which industry had responded to the challenge of regulation, to market opportunities based on the fact that environmentally sound could be economically sound in the long run. Industry was being creative in developing new products, technologies and services which had environmental benefits. This development was not only true in Europe, but also elsewhere. From a brief survey of European industry, responding to environmental concerns meant developing new products which went hand in hand with the development of new packages of products and services so as to contribute to projects on preserving or improving environmental quality. There was thus a case for a common approach to better define what constituted the environmental industry, which was a combination of many elements: new products, technology, know-how and manpower. In this respect, WT/CTE/W/67/Add.1 made a start. There was a need to further the debate on possible rules in this area. Recent jurisprudence might provide a basis for re-visiting Article XX; on GATS Article XIV, the EC reserved its position pending further examination.

108. In EC's view, preliminary analysis of WT/CTE/W/67/Add.1 indicated that aspects could be refined. Analytical work would be useful on the environmental benefits, focusing on factors affecting the demand for environmental services. The potential environmental benefits from removing trade restrictions and distortions in this area had not been clearly spelt out (e.g. broader availability of environmental services, lower prices through increased competition between domestic and foreign suppliers). It should be more clearly defined what was meant by environmental services drawing on the GATS list of CPC codes and definitions supplied by some Members, as well as other fora's work. A more precise classification was not a pre-condition to pursue analytical work to identify trade restrictions and distortions. It would be necessary to identify the linkages between environmental goods and services and the ways in which they were supplied. It would also be useful to review the scope of the CPC to verify whether the present list sufficiently reflected the current economic reality and technological developments.

109. The representative of Canada welcomed WT/CTE/W/67/Add.1 which summarized various fora's work on the environmental goods and services sector. Environmental goods and services constituted a closely linked package. Canada was active in pursuing the idea of trade liberalization in this sector in APEC. Concerning work in the WTO, Canada sought wherever possible to have discussions on trade and environment focus on concrete situations. As such, Canada was interested in pursuing further WTO discussions on trade liberalization in environmental goods and services.

110. The representative of the United States said WT/CTE/W/67/Add.1 confirmed the importance of the environmental goods and services sector and the link between work in this area and finding complementarities between environment and trade. It was noteworthy that NGOs at the Symposium had referred to this sector as one in which an important contribution could be made by the WTO. A definition of this sector was evolving in APEC and the OECD. He hoped the CTE would continue to focus on this sector and that concrete results could be achieved.

111. The representative of Norway said there was reason to believe that easier access to cheaper environmentally sound goods, services and technologies would ease the implementation of environmental policies in all countries.

112. The representatives of Japan, Indonesia, on behalf of ASEAN, and India said they would comment on WT/CTE/W/67/Add.1 at a later stage.

113. The observer of UNCTAD said that UNCTAD will hold an expert group meeting on strengthening the capacities of developing countries to develop their environmental services sector on 20-22 July. The UNCTAD Secretariat's background note for this meeting would focus on the trade

and development dimension, including demand generated factors for environmental services in developed and developing countries; GATS commitments and rules on public procurement; export opportunities for developing countries; actual or potential trade barriers; and capacity building.

114. The observer of the OECD said that the OECD Secretariat had made available the forthcoming publication on the environment industry of its joint working party with Eurostat for the preparation of WT/CTE/W/67/Add.1. This sector was a dynamic area in which there was a significant amount of work currently ongoing. Environmental policymaking had progressed considerably in recent years and it was important to emphasize that the environmental goods and services industry did not only include end-of-pipe goods and services, but also incorporated cleaner technologies and processes. One industry analyst had commented that the environment industry was less of a sector than an agglomeration of providers of many types of goods, services, and technologies which were usually integrated into production processes and often hard to separate. In this connection, he drew attention to paragraph 13 where it was mentioned that the OECD classification list aimed to allow for future structural changes such as shifts from end-of-pipe to cleaner technologies and processes. Concerning the comments made by the EC on the CPC, which had provided the basis for the GATS negotiations, he said that in light of new developments, the CPC was being revised. To the list in paragraph 20 which set out that environmental services covered other areas such as engineering, construction, research and development, he would add consulting.

#### General comments on Item 6

115. The representative of Switzerland said that the environmental effect which might result from removing trade restrictions was a complex issue, which was partly due to the absence of comprehensive environmental valuation techniques but also to the many factors which had to be taken into account. The complexity of the subject was reflected in WT/CTE/W/67. The document did not address whether or not trade liberalization put more pressure on national governments to reduce their environmental standards if they wanted to maintain competitiveness of their industries. For example, the diagram in the Annex showed how different policy tools could increase environmental benefits. At the end of the paragraph, it was stated that a tax could be used to increase the price from PE to PL in order to internalize the external costs, PL being the price of the sustainable forestry level. However, what was not discussed was that such a tax tended to reduce the competitiveness of the taxed producer.

116. In Switzerland's view, WT/CTE/W/67 could have provided a basis for discussing how the multilateral trading system could be improved with a view to enhance the positive (and to limit the negative) environmental benefits associated with trade liberalization. All possible and hypothetical environmental benefits were enumerated, with little effort to evaluate their relative importance. In paragraph 8, it was acknowledged that "removing trade restrictions and distortions was rarely synonymous with an unambiguous improvement in environmental quality". This fact was, however, practically ignored in the rest of the document. In fact, the rest of the document built on the assumption that trade liberalization unambiguously improved environmental quality, which was not a balanced approach. Negative environmental effects were treated marginally, even if their relative importance could be crucial (for example, in paragraph 43 on transportation, the OECD had found that 30 per cent of CO<sub>2</sub> emissions were due to transportation). Switzerland thought that it was important to have the full picture of the effects caused by the removal of trade distortions and restrictions, even if Item 6 only mentioned the environmental benefits of removing such measures. However, the terms of reference clearly allowed Switzerland to raise any relevant issue relating to the work programme.

117. Similarly, income growth effects were assumed to be strongly positive (paragraphs 11 and 37); this assumption was insufficiently substantiated. The studies cited in footnote 5 did not permit any unambiguous conclusions to be drawn. The question whether economic growth entailed net environmental benefits remained open, and Switzerland wondered where and under what

assumptions an unambiguous result would have been found, as suggested in paragraph 11. In this context, there was an unfortunate typing error in the first sentence of footnote 5, where "an inverse relationship" should read "an inverse u-shaped relationship". The OECD had found that a strong positive correlation existed between CO2 emissions and income.

118. Switzerland found the use of the term "subsidies" in the document problematic. Subsidies were treated as systematically wrong and distortive. For example, paragraph 70 stated that "[b]y distorting prices, energy subsidies exacerbate environmental problems", and paragraph 101 stated that "[s]ubsidies removal [...] represents a necessary step towards removing the most prevalent economic instrument hampering the achievement of sustainable fisheries management". Switzerland agreed that subsidies which encourage the use of environmentally damaging production methods or the consumption of polluting substances should be removed. However, the document did not recognize that there existed also corrective or "Pigovian" subsidies which were designed to improve resource allocation and increase efficiency. The document implied that essentially all subsidies should be removed. Switzerland recalled that WTO Members had never reached such a conclusion. To the contrary, they had acknowledged the fact that, if certain conditions were fulfilled, taxes and subsidies were legitimate policy instruments. It should be emphasized that "non-specific" subsidies in the sense of the WTO Subsidies Agreement should not be regarded as distortive. The document did not recognize that subsidies, in general, and direct income payments to farmers, in particular, could be - and, in some cases, were - made contingent on environmental criteria. Switzerland had made this point for the agricultural sector.

119. Paragraph 66 stated that "[i]t is generally felt that the removal of subsidies and the restructuring of taxes to bring energy prices in line with marginal costs could result in significant environmental benefits". For Switzerland, in order to minimize the negative environmental effect, energy prices should be brought in line with social costs. This meant that prices should not only reflect marginal productions of energy but also environmental costs. It was not appropriate to express unsubstantiated "feelings" in the document, especially in view of the fact that "caution is required when drawing conclusions about the environmental impact of energy policy reform" (paragraph 70). The energy section was more balanced than the rest of the document. The forestry section stated that "deforestation had little to do with international trade" (paragraph 123). How did the Secretariat explain the fundamental difference between agriculture and forestry with respect to their relation to international trade? Why did the Secretariat call for "domestic resource management policies to protect forest resources and raise the value of forest products" (paragraph 126), but it did not correspondingly call for "domestic resource management policies to protect agricultural resources and raise the value of agriculture products"? Switzerland said that the removal of trade restrictions and distortions would not automatically result in environmental benefits. The elimination of such measures will only have positive environmental effects if appropriate national environmental policy were already in place.

120. The representative of Cuba, on behalf of Bolivia, Cuba, El Salvador, Honduras and the Dominican Republic, said that *Agenda 21* highlighted that the achievement of sustainable development called for solution of environmental problems as a whole. Since environmental responsibilities were of a global nature, efforts to solve them would have to be shared in accordance with the level of development of each country. The process of development will not gain momentum if the global economy lacked flexibility and dynamism resulting from trade liberalization. Trade should be multilateral and open as well as equitable, secure, non-discriminatory and predictable. Although developing countries were trying to adopt higher standards of environmental protection, they should never be dealt with from the same viewpoint as developed countries. Patterns of production and consumption originating in industrialized countries were among the main causes of environmental degradation. Thus, trade liberalization would be beneficial to developing countries to the extent it developed in a climate in which: the deterioration in the terms of trade disappeared; countries respected the Rio commitments and complied with their commitment to devote 0.7 per cent of GDP to ODA; and developing countries were given access to technology. Developing countries

should not be marginalized by trying to establish common environmental standards in different national contexts. The establishment of unilateral, restrictive and extraterritorial trade measures must be replaced by multilateral cooperation. Instruments such as eco-labelling and packaging regulations should not be used as technical barriers to trade. It was also necessary to achieve transparency to raise domestic capacity on these matters. He requested that CTE documentation be circulated in advance of the meetings in all WTO official languages.

121. The representative of Mexico supported Cuba's statement on behalf of several Latin American countries and noted the progress achieved in the discussion. Identifying "win-win" situations should be the central task of the CTE with respect to the second part of Item 6. The WTO's mandate was to facilitate trade according to the principles of non-discrimination, transparency and predictability. The elimination of trade restrictions and distortions, such as subsidies, would be beneficial to trade and was a necessary step to bring the multilateral trading system into a balanced and equitable state for all countries. The analysis in WT/CTE/W/67 as well as Members' national sectoral experiences suggested that eliminating trade restrictions and distortions could also result in complementary environmental benefits. As noted in the 1996 Report of the CTE, environmental problems required environmental solutions. Above all, the implementation of environmental and resource management policies, which were effective and appropriate at the national level, was a prerequisite to finding solutions to environmental problems. In no case should trade policies be applied as a substitute for well-designed, appropriate environmental policies to solve environmental problems or issues related to conservation or resource management.

122. In Mexico's view, this was a complex subject which would require time to examine. The exchange of views from a sectoral perspective as a basis for the discussion under Item 6 was useful, keeping in mind that the list of sectors being analysed was an illustrative, not exhaustive list. By discussing sectoral examples, the CTE should not adopt a narrowly defined sectoral perspective of trade and environment issues. She agreed with the EC that any conclusions resulting from the analysis would have to be applied horizontally, not just on a sectoral basis. Mexico gave importance to the horizontal nature of the rules which governed trade to ensure that all countries were able to participate. In terms of subsidies, agriculture was the only sector which, however unfortunately, had been given special treatment in the WTO. This sector would have to be reviewed in the context of its own specific nature in the WTO and would require greater emphasis in the analysis.

123. The representative of India said the sectoral discussion in WT/CTE/W/67 was useful in addressing the second part of Item 6. On the first part of Item 6, he suggested further discussions along the lines of India's non-paper (dated 20 June 1996) to evolve the means for safeguarding and enhancing developing country's market access. An integrated discussion on Item 6 would help the CTE to address its mandate from the correct perspective. India supported the view expressed by Cuba, on behalf of several WTO Members, especially on the need for a differentiated approach for developing countries, keeping in mind the objectives of sustainable development. Paragraph 3 of WT/CTE/W/67 correctly noted that trade liberalization was not the primary cause of environmental degradation, nor were trade instruments the first best policy for addressing environmental problems. Regarding indirect benefits of removing trade restrictions and distortions, it was important to keep in mind that if these restrictions were addressed to policy options entailing trade liberalization, "win-win" situations could still be expected. In paragraph 4, resource misallocation had been discussed and it had been stated that distorted prices could obscure the abundance of underutilized environmental resources. This point should be pursued further to examine the optimal utilization of resources, particularly where they were available in developing countries. Availability of certain fibres, such as jute, and other resources in developing countries could be identified as areas where removing trade restrictions could help to achieve sustainable development.

124. India noted that in paragraph 6, the linkage between poverty and environmental degradation had been emphasized. Measures for ameliorating poverty in developing countries should be discussed in line with the recommendations of the 1996 Report of the CTE in paragraphs 173, 196 and 199 of



WT/CTE/1 as well as in India's non-paper on this subject. This raised the issue of the prompt and full implementation of the Uruguay Round commitments as noted in paragraph 7 of WT/CTE/W/67. In paragraph 8, it was stated that removing trade restrictions and distortions might not itself be a guarantee of improved environmental quality. While that was true, a distinction was necessary in the discussions of the CTE between these aspects of environmental quality which could be addressed through the multilateral trading system (like trade liberalization) and those which could not (like differing absorptive capacities) for the purpose of drawing conclusions on each sector in the document. Paragraph 9 appeared to undermine the value of trade in environmental goods and services. Paragraph 11 noted that such trade exceeded US\$250 billion. For developing countries, there might be much to gain in market access terms if such trade were directed towards their production of environmentally sound goods and services. In the same context, as regards the welfare gains from trade liberalization discussed in paragraph 10, the phenomena could be broadened to the global level to optimize production; what was needed was a globally consistent policy to drive home the benefits. If civil society was concerned about environmental degradation and interested producers were in favour of trade restrictions, such a political constituency could facilitate the task of furthering sustainable development.

125. The representative of Brazil welcomed the fact that the CTE was moving beyond rhetoric to analyse concrete cases of "win-win" situations. WT/CTE/W/67 represented a good start to move the discussions towards dealing with the substance of the issues. Further progress would depend on Members' contributing their national experiences, not only on concrete problems, but also on potential solutions to these problems. Brazil's discussions under this cluster had been based on an effort to make a contribution in the agricultural, leather, and energy sectors. In the agricultural sector, soya was an example of a "win-win" situation. The cases of ethanol in the energy sector and leather represented two more specific areas in which the potential existed for "win-win" outcomes. Brazil would comment on other sectors under Item 6 in the future.

126. The representative of Turkey said that under Item 6, market access and trade liberalization had been approached from an environmental perspective, one of the core subjects of CTE work. As such, and because of the challenges this presented, it was of particular interest to Turkey. The CTE had made significant progress in search of ways in which the WTO could contribute to making trade and environment mutually supportive through trade liberalization and economic development. General issues had been identified and a sectoral approach had been followed to analyse the challenges and opportunities associated with these issues. WT/CTE/W/67 contributed to broadening and deepening the analysis; the sectors covered were important and Turkey would comment on them at a later stage. There was a positive relationship between removing trade restrictions and environmental improvement. Trade expansion through liberalization reduced poverty and encouraged the efficient use of natural resources. Market liberalization led to an increase in availability of environmentally friendly goods and services and provided technology and financial resources to address environmental problems. However, trade liberalization did not guarantee environmental protection and trade measures were not the best instruments to address environmental problems. For the objectives of trade and environment to be mutually supportive, trade liberalization should be accompanied by appropriate environmental policies. Sufficient attention had not been given to energy transportation in relation to the environment, which had serious negative environmental effects. Environmental benefits resulting from the removal of trade restrictions were likely to vary between countries. A comprehensive analysis which aimed to find "win-win" situations should avoid generalizations and should reflect exceptional cases. As such, the sectors in WT/CTE/W/67 might be broken down into subsectors and analysed from different points of view to capture the range of environmental effects of trade liberalization. It would be worthwhile to examine whether new sectors could be included in the assessment.

127. The representative of Norway said WT/CTE/W/67 could give important inputs to possible future negotiations on market access. He recommended that the document be further revised in light of delegations' comments. He said that it was imperative that other WTO Bodies in addition to the

CTE take environmental aspects into consideration, where appropriate. This should be the case with regard to ongoing work in various WTO Bodies and in future WTO negotiations. The introductory section of the document contained general statements on the relationship between trade liberalization and environmental benefits. The document's purpose was not clearly stated in the document itself. Norway's general aim was to make environment and trade policies mutually supportive. One way to do that would be to identify so-called "win-win" situations where trade liberalization might yield a double dividend of environmental and economic gains. In undertaking this complex analytical process, a number of sectors and situations would have to be examined. Some sectors would be classified "win-win", whilst others might be found to be "win-lose", where removing certain trade restrictions or distortions would lead to net negative environmental effects. Both categories should be reflected in the document. The document should pay equal attention to both negative and positive environmental effects flowing from further trade liberalization examined in the sectoral analysis in order to identify net environmental benefits. This was necessary in order to ensure an objective analysis. Norway thus preferred the title of the document to read "net environmental benefits". Norway would insist that the subtitles and the text, especially the introduction, be changed to reflect both positive and negative environmental effects.

128. Norway stated that the introduction indicated in several places that trade liberalization automatically led to environmental benefits (paragraphs 2 and 6). However, it was likely that both "win-win" and "win-lose" situations would occur depending on the area and circumstances. The results of the analysis of the various sectors/situations would provide the answer to whether there was a potential for a "win-win" situation or not. It was unclear whether paragraphs 9 to 11 were conclusions based on the sectoral analysis or indicators according to which the analysis had been undertaken. It would be wise to distinguish more clearly between the introduction and conclusions based on the sectoral analysis. While the introduction aimed at preparing the ground for the sectoral discussions, the conclusions (sectorwise to the extent that they varied substantially between sectors) should objectively summarize the most important sectoral findings. The environmental benefits presented in paragraph 10 might need some further clarification. It was not evident how and to what extent "improvements in the institutional, regulatory, monitoring or enforcement capacities of environmental agencies" were linked to trade policy reforms. The rest of paragraph 10 did not clarify the first sentence of the paragraph; and the content of this paragraph was not reflected in the concluding paragraph 12. More attention could be paid to the environmental impacts of transportation. As a substantial proportion of SO<sub>x</sub>, NO<sub>x</sub>, and CO<sub>2</sub> emissions were linked to transport, the document should try to give a rough indication of the extent to which trade liberalization would contribute to these emissions. Due to sectoral variations, this issue could, where appropriate, be examined sector by sector, but it should also be referred to in the introduction (in a separate paragraph) and possibly in the conclusions.

129. The representative of the European Communities noted the efforts in WT/CTE/W/67 to take account of Members' views. This document was an informative contribution to CTE work although the EC, like others, did not agree with every point, nor all the conclusions made. Overall the document represented a well-balanced overview of the environmental benefits of removing trade restrictions and distortions and provided a useful source of reference. The EC welcomed the wider availability of this document arising from its derestriction. Citing the 1996 Report of the CTE, WT/CTE/W/67 noted that trade liberalization in general could be of environmental and developmental benefit by facilitating a more efficient allocation and use of resources. Although the document identified the adverse consequences of some aspects of trade liberalization and noted that flanking measures may sometimes be necessary, it concentrated, based on the mandate of the CTE, on the environmental benefits of removing trade restrictions. An important qualification was that although trade liberalization had a key contribution to make to sustainable development, it was a precondition. Rather, sustainable development must be based first and foremost on sustainable management practices; appropriate environmental policies were needed above all at the national level, if the full benefits of trade liberalization were to be realized in the domestic, regional and global environments.

130. The EC supported the direction of the introduction and the point that the removal of trade restrictions was rarely synonymous with unambiguous improvements in environmental quality *per se*; there may be positive effects but these were not automatic. The relationship was complex as was the measurement of any environmental benefit which may result from liberalization. The EC agreed with the general remark that the removal of trade restrictions and distortions improved the overall functioning of markets, particularly a more open and liberal trading system increased the opportunity to disseminate environmentally sound products, services and technologies. The EC also agreed with the statement that adverse production and consumption externalities must be integrated into the decision-making process for the benefits described to become reality. These externalities must also be reflected in the price of goods and services. In response to ASEAN's question, he said there was an initiative in the Dutch Parliament on the labelling of timber; before the procedures of the Dutch Parliament were completed, this proposal would be submitted to the Commission for its compatibility to be checked with EC legislation, including international obligations.

131. The representative of Japan said a more comprehensive analysis was necessary to take into account the positive and negative environmental effects of trade liberalization. Other elements should also be reflected such as multifunctions and externalities associated with for example agricultural activities, including biodiversity, landscape and flood and soil prevention. Such an approach was vital to achieve the best relationship between market access and the environment. The level and nature of trade measures on the environment would vary depending on natural conditions, such as climate, soil, production methods as well as other economic and social conditions in each country or area. As Switzerland had noted, the removal of trade restrictions and distortions would not automatically result in environmental benefits. Although the title of WT/CTE/W/67 was "environmental benefits of removing trade restrictions and distortions", considering only the benefits while neglecting the negative aspects would not result in "win-win" situations. Japan supported Norway's suggestion to review the document.

132. The representative of Argentina said that he agreed with those that considered that liberalization of trade did not guarantee greater environmental protection, particularly if the price of traded goods did not reflect the full cost of production. To promote a cooperative relationship between environmental protection policies and the multilateral trading system, before introducing further trade restrictions, those that prevented the true production costs from being reflected in the actual price of traded goods had to be eliminated. Prices determined decisions made by investors, producers and consumers; price distortions altered the message sent to economic players, which had a clear environmental impact, particularly on commodity prices. There were three reasons for this: (a) commodities formed the basis of the production process, so any change in their prices had a knock-on effect on the remainder of the process; (b) commodities had a cost structure that was much simpler than that of goods produced by a greater level of manufacturing, which meant that an incorrect valuation of the natural resource being exploited (land, fishing stocks, forests, air, or water) would have a much more appreciable effect than on products with a more complex cost structure; and (c) commodities were basically fungible, so that any price distortions would easily be transmitted to the international pricing system.

133. Therefore, in Argentina's view, any change in prices might distort the message which was sent. The relative scarcity of any single factor involved in production (e.g. natural resources, such as land or water) was obscured and this stood in the way of determining the system's capacity to sustain a given production over a period of time (known as sustainable production). Accordingly, it should be asked which of the present trade restrictions and distortions might alter prices and thus have to be removed to benefit the environment. As was recognized in Principle 16 of the Rio Declaration, to be in a position to implement a policy of sustainable production, the prices of goods had to reflect both the private costs of production and the environmental externalities caused during their production, distribution, consumption and disposal. Policies implemented by some OECD countries that subsidized production and exports artificially depressed international prices, to the extent that they did not even reflect the private cost of production, and prevented any possibility of implementing

environmental policies conducive to incorporating environmental externalities. In short, subsidy policies that affected commodity's output could give rise to two types of negative environmental effects: (a) local effects, through the spread of overexploitation practices; and (b) global effects, forcing those producers, who were not beneficiaries to these government support practices, to accept distorted international prices, which left them facing a harsh choice: either to overexploit their own resources in order to increase their immediate output, or to abandon the market.

134. The representative of Australia welcomed the derestriction of WT/CTE/W/67, which had added greatly to the understanding of the issues at the NGO Symposium. The document usefully collated a large amount of existing information on trade-related economic policies and trends, environmental policies and conditions and analysed the linkages. Its conclusions about the clarity of these linkages varied, as they should according to the sector and associated complexities. But the document pointed to a variety of natural resource based sectors where there was a considerable weight of expert opinion pointing to the potential that reform of economic and environmental policies had, at both the domestic and international level, to provide overall developmental and ecological benefits. The debate on this Item in the CTE had raised a number of factors which were important when considering how to maximize the level of certainty about the environmental results of trade reform, such as care and efficiency in policy design, improving the monitoring and assessment of environmental factors, and the overall need for environment and related policies to internalize environmental costs. Building the capacity of national governments to deal with this would be vital. Although this had been generally agreed, it should not be forgotten that significant efforts were already underway internationally and domestically due to the recognition of the absolute importance of policies in these areas for environmental management overall.

135. Australia had focused particularly on agriculture and fisheries, both of which had been the subject of considerable empirical analysis that confirmed the potential for significant environmental and economic benefits to flow from reform. As such, there was sense in arguing for a continuing focus on them and other natural resource based sectors where the market distortions were greatest and where the identification by the CTE of particular trade policy reforms had the greatest potential to deliver a double dividend. Australia reassured some delegations that they did not want to jeopardize the positive social and environmental benefits facilitated by agriculture. However, these benefits had to be reached in the most efficient, targeted and transparent way possible, without the massive economic and environmental distortions that were currently being experienced. This issue of policy efficiency, referred to by the US, was a key aspect to consider. WT/CTE/W/67 had been unfairly criticized on a number of occasions. The words "automatic" and "automaticity" had been used in connection with its analysis of the relationship between trade reform and environmental benefit, particularly concerning agriculture. This criticism was unfair. WT/CTE/W/67 provided a clear and relevant analysis of the complexities in this area, and the importance of the interaction between economic, trade and broader environment policies. It had also been useful in inspiring a sector-by-sector approach to Item 6, which had been useful in facilitating a productive and focused discussion.

136. The representative of Pakistan said the CTE should identify "win-win" situations. At the general level, there was a "win-win" situation which was created by the positive relationship between trade liberalization and increasing per capita incomes. This linear relationship may not hold in all cases unless supplemented by other measures, including environmental measures and positive measures, including technology and financial transfer. The general validity of this relationship was undeniable. Deeper consideration should be given to identifying specific "win-win" situations, such as those set out by Members and to determining to what extent general principles could be derived from these situations for overall discussions on trade and environment. This would avoid a reiteration of positions.

137. The representative of New Zealand said the sectoral discussion emanating from WT/CTE/W/67 had been useful. He shared Australia's comments on some of the unfair criticisms of the document. New Zealand's approach was to look for complementarities between trade

liberalization and environmental benefits; the discussion illustrated that there were many. Some of the statements of concern about the purported adverse environmental consequences of trade liberalization, for example in the agricultural sector, seemed to convey the impression that at the time a number of the key trade distorting policies were put in place, for example export subsidies, the objective had been to achieve environmental benefit. He challenged this suggestion. The concerns expressed about trade liberalization in some areas did not seem to be concerns about adverse environmental effects as such, but more simply, concerns about the notion of reform or change. The WTO should not be reluctant to look at reform and to consider change, particularly given the complementarities identified between reform and environmental benefits. Brazil, Canada and Pakistan had pointed to continuing to work in a practical manner in this area on the basis of national experiences which were brought to the attention of the CTE, to study individual sectors in order to see the close nexus which existed between trade liberalization and environmental benefits. Whilst he felt WT/CTE/W/67 had stimulated a useful discussion, this was only the beginning and it was up to delegations to continue to contribute their national experiences. New Zealand would be contributing to this process in several sectors, such as fisheries and agriculture.

138. The representative of Canada said the sectoral and general discussions under Item 6 had been better than in previous discussions, which reflected its more focused structure based on WT/CTE/W/67. In general terms, the document had been unfairly criticized. The CTE should keep in mind that WT/CTE/W/67 was a working document intended to stimulate discussions. Canada would prefer more presentations or contributions on concrete national experiences to refine the analysis in the document, rather than revising it. Delegations had to rise to the challenge of contributing their national experiences. Canada hoped that whenever Item 6 was addressed, the discussion could be structured in the same manner. The sectoral approach was a tool to allow Members to deepen their understanding of the issues. As was illustrated in the NGO Symposium, there was an advantage to an improved understanding amongst civil society that the market access cluster may provide more immediate environmental and developmental benefits than the other cluster, although both clusters were equally important.

139. The representative of the United States said that the discussion should be balanced; the CTE should not engage in oversimplistic analysis of the issues. Although there was a need for complementarity between trade and environmental policies, this should not be used as a reason not to liberalize trade. To the extent areas were identified in which it was particularly important to have complementary policies, it would be important to help governments in identifying these policies, as opposed to finding reasons not to liberalize. He supported New Zealand's comment that Members should resist any impulse towards green cloaked protectionism, or to find new reasons for old trade barriers. It was important to examine the unique contribution which the WTO could make in the area of trade and the environment. The WTO's vocation had been to try and improve market efficiency; this was complementary to efforts in the environmental field to try to get to the right price. This was the emphasis that many Members had on subsidies, particularly those subsidies which interfered with market signals. Given that the WTO was a Member led organization, the time had come for Members to take the analysis further; it was not the task of the Secretariat to solve disagreements which Members could not solve amongst themselves. It was particularly useful that a number of countries had contributed their national experiences to take this process forward, such as Canada, Brazil and Colombia.

140. The representative of Mexico said it was necessary to look at the approach of the discussions under Item 6 and the function of Secretariat documentation. It was necessary to identify "win-win" situations where trade liberalization could be environmentally beneficial; this was the mandate of the CTE. This would be the positive contribution which the CTE could make on this Item. WT/CTE/W/67 served to provide a basis for the discussions. Mexico did not wish this document to be revised as it was not a negotiated document. She suggested that in the next discussion of Item 6, Secretariat documentation and national contributions could be included on the first part of Item 6, the effect of environmental measures on market access, in particular in relation to developing countries.

141. The representative of Korea said that as it was clear that a consensus did not exist on the environmental effects of the agricultural trade liberalization, it would not be possible to make a hasty generalizations. Korea did not wish to repeat its position on this issue. It could not be ignored that there were positive and negative effects of trade liberalization. Without regard to country specific situations and special developmental and social needs, analysis which was solely based on an economic perspective could not lead to a reasonable conclusion.

142. The representative of Malaysia, on behalf of ASEAN, supported the call for continued discussions based on national experiences with a view to identifying "win-win" situations; this could move forward the discussions. Concerning Canada's statement, ASEAN reiterated that all items on the work programme should be given equal emphasis, as mandated by Ministers.

Item 2                    The relationship between environmental policies relevant to trade and environmental measures with significant trade effects and the provisions of the multilateral trading system

143. The representative of the European Communities informed the CTE that the EC had recently commissioned a study on environmental reviews of trade measures and agreements, to be finalized in 1998. Its objective was to develop a methodology of options to implement the OECD guidelines on environmental reviews of trade measures and agreements in the EC. As part of this study, a survey of experiences in other countries and at the international level would be conducted; consultants who were conducting the study would contact the WTO Secretariat and some WTO Members to collect information and the EC would be grateful if Members would extend their assistance to them. The EC would keep Members informed on progress on this initiative.

144. The representative of the United States said the discussion on market access issues had highlighted the role that environmental reviews could play to ensure complementarity between trade and environmental policies. The US welcomed the EC's statement and hoped that, when its review process had been completed, the EC would consider presenting its experience. The US had been encouraged by the response to its presentation on US environmental reviews, and hoped others who had performed similar reviews would share them in the CTE.

Item 3(b)                    The relationship between the provisions of the multilateral trading system and requirements for environmental purposes relating to products, including standards and technical regulations, packaging, labelling and recycling

145. The representative of Colombia presented his delegation's paper on the Colombian flower sector and eco-labelling and its impact on market access (WT/CTE/W/76-G/TBT/W/60). Colombia is the second largest exporter of flowers after the Netherlands, with a world market share of approximately 10 per cent. In preparing this study, it was noted that there was a great interest in the Colombian private sector to develop instruments to efficiently link environment and trade provisions. The guidelines to develop these tools had been based on the principles of transparency, equivalence and mutual recognition. Concern for the management, conservation and sustainable use of water resources used in production schemes in the flower sector had led to a sustainable management initiative, the FLORVERDE programme, which covers the continuous and gradual improvement of production at the sectoral level. Through a registration system, the objective was to identify 20 per cent of the companies with the best environmental performance. The performance of these companies would be used as the goal to achieve for the remaining companies over the next three years. Every three years there would be an evaluation of the system to set new performance levels. Likewise, case studies had been carried out on how eco-efficiency could be achieved. Another focus of the programme was to enhance environmental management systems in floral companies, as the type of ISO 14001, to enhance market access and improve productivity. When a management system was adopted which rationalized resource use, such as lower use of energy and water and increased

floral production, the environment was protected whilst production costs were reduced and productivity increased. This was a clear example of a "win-win" situation.

146. Despite these efforts towards environmental protection, Colombia's flower sector had encountered difficulties with market access in certain countries due to the fact that private organizations had promoted a campaign to denigrate Colombian flowers based on isolated and unjustified cases. In turn, these organizations offered the implementation of eco-labelling schemes on unacceptable conditions for Colombian exporters; the proposed eco-labels were discriminatory as they were only aimed at certain countries, and their costs were high with the revenue collected devoted to the functioning of the label in the importing country. This was a coercive measure and the Colombian private sector had refused to subscribe to these eco-labels which had resulted in the increase of campaigns against Colombian flowers. The checklist proposed under the eco-labelling programme used unclear language and was arbitrary and was monitored by foreign experts. Thus, the proliferation of eco-labels made it impossible to comply with the requirements of the different checklists required by each country's organization.

147. Given this experience, Colombia felt it was important for the CTE to develop a clear position on this issue so as to avoid the proliferation of private eco-labels without common standards or monitoring to ensure that they did not create trade and market distortions or confuse consumers. It is essential to guarantee transparency in the processing and application of eco-labels and to ensure their non-discriminatory character and that interested parties had the opportunity to participate in their development. In this respect, eco-labelling programmes should be subject to the provisions of the TBT Code of Good Practice. The WTO should study and develop mutual recognition and equivalence with respect to eco-labelling; their application could solve some of the problems raised in Colombia's paper. Eco-labels could have significant market access impacts as highlighted by Colombia's experience in the flower sector and Canada's experience in the forestry sector.

148. The representative of Egypt said, as set out in WT/CTE/W/79, eco-labelling studies illustrated the increasing evidence that developing countries were severely affected by environmental requirements, including eco-labelling. In some cases, these requirements represented 5 to 20 per cent of additional costs on exported products, which placed a burden on developing country exporters, particularly SMEs. An ITC workshop on eco-labelling and other environmental quality requirements related to textile and clothing exports from developing countries had concluded that some of the problems faced by developing countries resulted from the multiplicity of eco-labelling schemes in developed countries and their differing criteria. Some schemes were found to lack credibility, and the manner in which they set standards was rushed. Eco-labels were more a commercial and marketing tool than an environmental one. Egypt set out some recommendations to find a solution to this problem: (a) allow developing countries to participate in the setting of criteria and standards so as to ensure that their interests are taken into account; (b) provide developing countries with the necessary technical assistance to improve their environmental performance; and (c) increase harmonization and mutual recognition of eco-labelling schemes, while ensuring that one country's standards were not imposed on another for recognition to be accorded. Egypt felt WT/CTE/W/79 could have included conclusions and recommendations by the WTO in this area to move CTE work forward. The title of WT/CTE/W/79 could be amended to include reference to market access effects, particularly in developing countries, and include ways in which developing countries could address eco-labelling concerns.

149. The representative of Ecuador shared many of the conclusions in Colombia's paper. He highlighted certain eco-labelling initiatives which had also had an impact of Ecuador's exports. The flower sector was one of the most dynamic in Ecuador's economy and was the export sector which had grown most in recent years. Increased flower exports were a result of efficiency in this sector and its capacity to adapt to market access conditions in importing countries. The Ecuadorian flower sector had adapted to increasing costs and different local conditions relating to eco-labelling in importing countries. Ecuadorian exports had to overcome new trade barriers similar to those set out in

Colombia's paper. Ecuador shared Colombia's concern on the lack of monitoring of international standards. Ecuador was concerned with the proliferation of private eco-labels which escaped the control of national institutions and went against WTO objectives. He supported Colombia's recommendation to examine the link between CTE work on eco-labelling and the TBT's Code of Good Practice. He encouraged presentations such as Colombia's based on national experiences.

150. The representative of Brazil said Colombia's national contribution was an example of the impact of the proliferation of eco-labels on trade in Colombia's flower sector. Brazil supported the need to implement paragraph 185 of the CTE 1996 Report to ensure that national eco-labelling programmes were non-discriminatory and based on consensus. Brazil thanked Canada for its high tech presentation and paper, perhaps the first of its kind in the WTO, on the forestry sector, which represented a substantial contribution to the discussions. In a similar manner, Brazil would like to contribute its national experience with eco-labelling programmes in the leather and forestry sectors. The Brazilian Association on Technical Standards (ABNT) was the standardization body responsible for the development of the Brazilian Eco-labelling Programme. Besides being a founding member of ISO and the International Electrical Committee (IEC), ABNT also participated in regional arrangements such as the Pan American Cooperation on Technical Standards (COPANT) and the Mercosur Committee for Standardization. Since 1995, the ABNT Technical Committee on Environmental Certification had been working on the development of criteria for leather and footwear products. Representatives from industry, Government, research institutes and NGOs participated in the Technical Committee. Whenever there was a consensus in the Committee on certification criteria, these criteria were submitted to public consultation according to the guidelines of ISO 14024 ("Environmental Declarations and Labels – Environmental Labelling Type I – Principles and Procedures"); ISO/IEC Guide 59 (Code of Good Practice on Standardization); and the WTO Code of Good Practice on the Elaboration, Adoption and Application of Standards. The public consultation process ensured that parties interested in the environmental labelling program on leather and footwear had the opportunity to provide input on the proposed criteria. Participation also ensured that the Committee took into account the appropriateness of every comment to be incorporated to the document. The credibility of this process was maintained by the fact that all interested parties participated.

151. The forestry sector, supported by technological research institutions, had begun to develop a labelling program, CERFLOR, to verify and certify the origin of Brazilian forest-based raw materials. To structure CERFLOR according to international labelling standards, a Technical Committee on Forestry Labelling had been created in 1997. NGOs, Governments, research institutions and the business sector participated in this Committee. This programme was based on the guidelines of ISO/FDIS 1402 (Environmental Labels and Declarations - General Principles). The Technical Committee's work also followed the ISO/TC 207/WG2 Technical Report on Forestry. CERFLOR was a complement to possible environmental management system certification based on ISO 14001, which already took into account aspects of environmental performance. CERFLOR was based on five principles that applied to natural and planted forests: (a) biological diversity conservation; (b) sustainability of renewable forestry resources and the rationality of its use in the short, medium and long term; (c) water, soil and air protection; (d) environmental, economic and social development of the regional area where the forestry activities take place; and (e) law enforcement. These principles took into account different forest types at the regional and local levels. It should be noted that CERFLOR and the leather and footwear labelling were voluntary programs that aimed to encourage Brazilian consumer awareness, and ensure that Brazilian forestry and leather and footwear products were competitive in the international market.

152. The representative of the European Communities said that the Items in the market access cluster should not be addressed from a narrow market access perspective. It was not appropriate to consider the market access impact of eco-labelling schemes without considering the role these schemes can play to promote sustainable consumption and production. This role was recognized in



*Agenda 21* and the CTE 1996 Report. He thanked Canada, Colombia and Brazil for their contributions. It was important to take into account that eco-labelling was only one among many instruments of environmental policy. As the EC had indicated in its non-paper on eco-labelling (23 July 1996), it would be difficult to imagine a less trade restrictive alternative. Eco-labelling schemes were voluntary and relied on the market mechanism of consumer choice. Discouraging the use of eco-labelling schemes might provide an incentive to use other instruments with more of an impact on market access. Nevertheless, the EC recognized the need to ensure increased transparency in the management and operation of these schemes to ensure they were not operated in a discriminatory manner. He noted that the CTE had not effectively addressed the effects of non-governmental schemes such as those presented in Colombia's paper. He informed the CTE that the EC had undertaken new initiatives to make its eco-labelling scheme more transparent. Information on the EC eco-labelling scheme was available on the EC website.

153. The representative of India said WT/CTE/W/79 illustrated that the concern about the restrictive effect of eco-labelling requirements on market access of developing countries could be substantiated by studies in relevant intergovernmental organizations. The broad issues which arose for the consideration of the CTE were: (a) the way eco-labelling criteria took into account the conditions of individual developing countries - referred to in the studies by ESCAP in paragraph 4, ITC in paragraph 8, UNCTAD in paragraph 22, OECD in paragraph 31 of WT/CTE/W/79; (b) the adverse impact on SMEs in developing countries, especially the impact of eco-labels on their market access opportunities - referred to in the studies by ESCAP in paragraphs 10 and 12, and UNCTAD in paragraph 26; (c) the increased costs for developing country exporters in complying with eco-labels - referred to in the studies by ESCAP in paragraph 12, and ITC in paragraph 20; and (d) the need for greater transparency, and for more effective and representative participation of developing country exporters, especially SMEs - referred to in the studies by ITC in paragraph 18, UNCTAD in paragraph 22, UNIDO in paragraph 29, and OECD in paragraph 31. The CTE should provide Members with an opportunity to discuss these issues. Referring to Colombia's experience and concerns on the market access restrictions caused by private eco-labelling schemes, he said that this illustrated the protectionist impact of eco-labels on developing country exports. Ostensibly put in place to achieve environmental objectives, such eco-labelling schemes were in fact a means to restrict trade.

154. The representative of Pakistan said his delegation's reservations on environmental standards flowed from concerns about the motivation behind these standards and the extent they motivated consumer behaviour to purchase environmentally friendly products. Evidence in this regard was mixed. The OECD study contained the most optimistic assessment, which said that eco-labelling had only been moderately successful with several caveats. The other concern was whether these schemes had significant market impacts. Depending on the study, the evidence was also mixed. ESCAP illustrated that particularly in the Asian region there had been significant market effects. Pakistan was not sure how beneficial eco-labelling was to achieve environmental objectives. The body of evidence indicated that these schemes had negative market access impacts due to a proliferation of individual schemes, as illustrated in Colombia's paper, which imposed costs on developing country exporters, particularly SME. SMEs did not have the technical expertise to adhere to such schemes. One of the main concerns was that these schemes necessitated the adherence to inappropriate criteria, mainly as a result of the fact that all interested countries could not participate in their formulation. Implementation of these schemes without representation in their development led to various problems. If there were effective participation of developing countries, sufficient technology transfer, and credit lines for developing country producers, developing countries might be able to consider adhering to these schemes.

155. The representative of Korea thanked Colombia for contributing a case study on its flower sector. Colombia's paper illustrated a "win-win" situation which could achieve both improved environmental protection and increased productivity; it also highlighted some difficulties inherent in private eco-labelling scheme, and their potentially negative market access implications. The results of

recent studies on the trade effects of eco-labelling by international organization set out in WT/CTE/W/79 reinforced Korea's apprehension that the market effects were real and negative. Although most eco-labelling schemes were voluntary, they might cause discriminatory trade effects as illustrated by studies carried out by ESCAP and UNCTAD. According to the ESCAP study, large companies had reported adjustment costs of 8 to 10 per cent, while SMEs had reported costs of 15 to 20 per cent. The effect of eco-labelling on competitiveness and its role as a possible trade barrier and discriminatory tool against foreign products was clear. The key means to minimize the negative trade effects of eco-labelling were transparency, equivalency and mutual recognition. To ensure the transparency of developing and managing eco-labelling schemes, participation of all stakeholders in the consultations and decision-making process should be guaranteed. However, it could be extremely difficult for developing country exporters, which often lack information and capital, to participate in these processes on an equal footing. The existence of multiple schemes and constantly changing criteria compounded the problem. More flexible application of equivalence and mutual recognition was of importance to developing country exporters, particularly SMEs. During the NGO Symposium in 1996, many participants had complained about the ISO process and expressed doubt about the transparency of its consultations and decision-making and representation of all stakeholders; many developing country enterprises, especially SMEs, had not been involved in the ISO process. Although, WT/CTE/W/79 had not provided recommendations as to how these trade effects could be overcome, practical ways to address these problems should be explored.

156. The representative of Hong Kong, China thanked Colombia for its presentation. Hong Kong, China was examining its national experience with eco-labelling schemes. A common theme underlining studies in the area of eco-labelling and packaging was the need to ensure transparency. He was interested to learn more about the principle of extended producer responsibility, described in WT/CTE/W/75 as an emerging strategy used in OECD countries to promote the integration of environmental factors associated with product life cycle. This principle had already been applied in eco-packaging through different instruments, such as deposit refund schemes and product charges. Information to date, however, was limited as to the probable impact on market access and trade and competition. An OECD workshop in Helsinki in May was expected to shed light on these issues; the Secretariat could convey the outcome of this workshop. If there were significant market access impacts, then stock could be taken of whether these measures had been included in the WTO notification system and the environmental database (EDB).

157. The representative of Hong Kong, China agreed that eco-labelling schemes could distinguish between products by according preference to certain brands within the same product category by virtue of their relative environmental impact. This would not appear to be discriminatory as long as the same criteria were applied evenly to like products irrespective of the product's source. Schemes incorporating production-related criteria should be the subject of particular concern as they could discriminate against imports if they reflected exclusively the environmental preferences of the importing country. The process of selecting and adopting criteria, if not based on scientific and objective criteria, could be used as a protectionist tool. The use of production-related criteria in this respect was particularly problematic. However, all eco-labelling schemes, including schemes based on product attributes alone, in order to be effective had to have a tangible effect on the marketability of the product concerned and certain traders were bound to be disadvantaged. Transparency and participation in the adoption of criteria and equivalence of mutual recognition were important to mitigate any adverse trade effects. However, there was no assurance that this would provide a complete solution. The OECD study had not found any evidence to date of changes in trade flows from the use of eco-labelling in OECD countries. The UNIDO study noted that several SMEs were not aware of any adverse market access effects of eco-labelling. It was only reasonable to expect that environmental awareness would continue to increase, at which point these effects may become more obvious. He noted that there was a risk that if eco-labels were used as a protectionist tool, different countries might use these schemes on a reciprocal basis. He supported further work in this area, including on alternatives to eco-labelling, and technology transfer.

158. The representative of Malaysia, on behalf of ASEAN, thanked Colombia for its contribution. ASEAN said that the absence of an agreed international definition of what constituted sustainable forest management could result in eco-labelling programmes being used as a trade discriminatory tool. WT/CTE/W/79 illustrated this concern and elucidated the negative effects on developing countries in several sectors by drawing on conclusions of various studies. This clearly showed that eco-labelling was prone to be used as a commercial tool rather than an environmental tool, a point illustrated in Colombia's paper. Despite the Colombia's efforts to implement eco-efficient programmes, it was evident that these efforts had not met the objective for which they were in the first instance implemented. This showed that problems with the unilateral introduction and application of eco-labelling, including those implemented by private bodies, was unresolved; eco-labelling requirements had denied Colombia market access opportunities. This should be further discussed. He thanked the EC for clarifying the proposed eco-labelling initiative in the forestry sector and asked that ASEAN be kept abreast of developments in this area, either in the CTE or in any other relevant WTO forum.

159. The representative of Canada said the discussion had illustrated that eco-labelling was a real issue for many Members, particularly those Members who exported commodities. This was not a developed country/developing country issue. Canada had concerns on eco-labelling and a major sector of its economy had been affected. He highlighted paragraph 15 of WT/CTE/W/79, which noted that a number of eco-labelling programmes had been established in ESCAP countries. It would be interesting if those countries could share their experiences either with respect to programmes designed for the domestic market or those designed for export markets. As had been set out in its presentation on forests, Canada had developed some programmes such as the FPDS which had more of an export market orientation, but which could also be applied in the domestic context and come with a more domestic orientation such as environmental choice. Paragraph 34 illustrated how eco-labelling may be evolving from a retail to a distribution channel tool. As set out in Canada's national experience paper with its eco-labelling programme, this may result in these programmes having an increased market impact. The experiences outlined in Canada and Colombia's papers suggested that the distribution channel link and the effect that groups can influence distribution channel purchasing patterns that is increasingly important. This was an area which should be examined. On WT/CTE/W/79, he said it was up to delegations to determine conclusions based on the various approaches and experiences with these issues.

160. The representative of Canada thanked Colombia for its contribution on the flower sector. Concerning the EC's comment on the need for a balanced discussion, it was clear in terms of the national experiences presented by Canada, Colombia and Brazil, that the issue was not environmental improvement. Domestic programmes were designed to do this. There was balance in the discussion as all the examples which were mentioned referred to how Members had tried to develop national approaches to improve sustainable production practices; the FLORVERDE programme was a concrete example of how Colombia was trying to improve the economic and environmental production. The issue was how to deal with eco-labelling programmes and their potential to discriminate between equally valid approaches to improving environmental performance. In this context, Colombia's conclusions went along the same lines as those Canada was considering. He said Members should focus on the policy considerations in paragraphs 43-54, rather than footnote 1 as the time was not yet right to discuss footnote 1. He thanked Colombia for derestricting its paper and issuing it as a joint TBT paper; the paper was useful to have in the public domain given that it dealt with private programmes. It was important to send a policy signal that this issue had become one of interest in the CTE.

161. Concerning India's questions on how to deal with innovation within a three year time frame in Type I eco-labelling programmes, the representative of Canada said that the main criticism of industry was that these programmes were not flexible or rapid enough in comparison to Type III programmes. If the company currently did not meet the criteria, technological innovation within a three-year period would allow the company to get the label. In terms of how comments were taken into account, he

said that at the end of the review process there was an opportunity to have an explanation on the reasons if and how comments had been taken into account. Following paragraph 185 of the 1996 Report of the CTE, he thanked New Zealand (G/TBT/CS/N/86) and Japan (G/TBT/CS/N/73) for having their eco-labelling programme accept the TBT Code of Good Practice.

162. The representative of the United States said eco-labelling was a valuable tool to achieve environmental goals and to provide consumer information. It would be untenable for the WTO to go against providing consumer information. Although the US had experience with the implementation of particular programmes which had raised concerns, this did not detract from the value of eco-labelling in environmental policymaking. Based on the US experience, there was no reason to assume that private sector labelling schemes were likely to raise more issues than government sponsored programmes.

Item 4                    The provisions of the multilateral trading system with respect to the transparency of trade measures used for environmental purposes and environmental measures and requirements which have significant trade effects

163. The representative of Hong Kong, China said WT/CTE/W/77 provided a useful overview of environment-related notifications in 1997. The considerable number of relevant notifications and the wide range of WTO notification obligations involved demonstrated the importance of the EDB as a reference. The search methodology used in compiling WT/CTE/W/77 was sensible in view of resource constraints. Members should contribute to this exercise by providing the Secretariat with information on whether specific notifications should be included or excluded, as well as comments on the choice of search words. He supported the proposal in paragraph 7(b) of WT/CTE/W/78 that reviews should be conducted before the annual Comprehensive Review. The electronic delivery of the EDB should enable the widest possible use of the database. Appending the EDB to the DDF was a practical option in terms of accessibility and convenience. He asked what the cost implications were of a hyperlink. The EDB would be even more useful if the frequency of updating could be increased.

164. The representative of the European Communities said the proposals in WT/CTE/W/78 were consistent with the recommendation in the 1996 Report of the CTE. The EDB should be updated annually, such as had been undertaken for 1997 in WT/CTE/W/77.

165. The representative of Japan supported the proposals in WT/CTE/W/78 and said that, since all SPS measures dealt with the protection of human, plant and animal health, to treat all such SPS measures as environment-related would be misleading. This was the issue Japan had been considering with respect to which measures to consider as environment-related. Japan asked the Secretariat to clarify the criteria used to select the environment-related notifications in the SPS Agreement.

166. The representative of India was interested in examining whether any absolute gaps in transparency existed, as noted in paragraph 3 of WT/CTE/W/77. India supported the proposals in WT/CTE/W/78. He proposed that modifications to the glossary of search words should take into account the words "environmental technology".

167. The representative of Malaysia, on behalf of ASEAN, supported the proposals in WT/CTE/W/78.

168. The representative of Mexico stated that her delegation had no objection to the proposals in WT/CTE/W/78. Mexico shared Japan's concern with respect to the criteria used to define environment-related measures, which was an issue requiring further study in the CTE.

169. The representative of Brazil considered that, at this stage, the development of an EDB should focus on the most feasible options. The use of key words were appropriate criteria to capture the majority of environment-related notifications. The glossary of search words would have to be enlarged to cover further environment-related notifications. Brazil agreed to instruct the Secretariat to conduct an Interim Review of the appropriateness of the search words used in the compilation of the EDB. Concerning the EDB's dissemination, Brazil would not oppose the creation of an Internet hyperlink to be included in the DDF. However convenient this possibility might be, it may be costly. As such, Brazil supported the proposals to undertake a Comprehensive Review of all environment-related notifications to continuously update the EDB, such as had been completed for 1997 in WT/CTE/W/77.

170. The representative of the United States said it would be fruitless for the CTE to try to agree on the definition of an environmental measure. The only way the EDB could work would be if flexibility were given to the Secretariat to exercise its judgement and it was clearly stated that there was no agreement on what constituted an environmental measure. The glossary of search words would need to be continuously updated. For example, there was a gap between the fisheries-related notifications in WT/CTE/W/80 and WT/CTE/W/77. It would be valuable to have the EDB available in a format which would be immediately available to the public as the notifications it contained were not restricted documents. He proposed that WT/CTE/W/77 be derestricted as the first yield of a process which had been agreed at the 1996 Ministerial Conference, particularly in view of the forthcoming Ministerial.

171. The representative of the Secretariat said that in order to ascertain the cost of electronic dissemination of the EDB, a hyperlink would need to be set out in detail. The criteria which had been used in compiling the EDB were set out in paragraph 4 of WT/CTE/W/78; this glossary of search words would be continuously modified based on delegations' suggestions.

172. The Chairman said he would consult on the proposed derestriction of WT/CTE/W/77.

173. The CTE adopted the proposals for the Environmental Database as set out in paragraph 7 of WT/CTE/W/78 in fulfilment of the recommendations contained in paragraph 192 of the 1996 Report of the CTE to the Singapore Ministerial Conference (WT/CTE/1).

#### Other Items

174. The representative of India requested his delegation's statement in response to some of the comments which had been made on India's paper, WT/CTE/W/66, on the issue of market access and the transfer of environmentally sound technology, be circulated as a CTE working document. As the EC had mentioned with reference to eco-labelling, India felt that there was no need to adopt a narrow approach with respect to the market access cluster.

175. The CTE expressed its appreciation for the substantive contribution of Mr. Scott Vaughan to work on trade and environment as a Member of the WTO Secretariat.

ANNEX

COMMITTEE ON TRADE AND ENVIRONMENT

Work Programme and Schedule of Meetings for 1998

1. As agreed in the 1997 Report of the Committee on Trade and Environment (WT/CTE/2), the CTE will continue to broaden and deepen the analysis of all Items on its work programme based on the "cluster approach" under the themes of market access and the linkages between the multilateral environment and trade agendas. Time will be allotted for Members, if they so wish, to return to Items discussed at the previous meeting.

2. At the meeting on 19-20 March, the CTE will address those Items relevant to the theme of market access, including:

- Item 2: the relationship between environmental policies relevant to trade and environmental measures with significant trade effects and the provisions of the multilateral trading system;
- Item 3: the relationship between the provisions of the multilateral trading system and:
  - (a) charges and taxes for environmental purposes;
  - (b) requirements for environmental purposes relating to products, including standards and technical regulations, packaging, labelling and recycling;
- Item 4: the provisions of the multilateral trading system with respect to the transparency of trade measures used for environmental purposes and environmental measures and requirements which have significant trade effects; and
- Item 6: the effect of environmental measures on market access, especially in relation to developing countries, in particular to the least developed among them, and environmental benefits of removing trade restrictions and distortions.

3. At a meeting on 23-24 July, the CTE will discuss the Items related to the linkages between the multilateral environment agenda and the multilateral trade agenda, including:

Information session with selected Secretariats of Multilateral Environmental Agreements;

- Item 1: the relationship between the provisions of the multilateral trading system and trade measures for environmental purposes, including those pursuant to multilateral environmental agreements;
- Item 5: the relationship between the dispute settlement mechanisms in the multilateral trading system and those found in multilateral environmental agreements;
- Item 7: the issue of exports of domestically prohibited goods; and
- Item 8: the relevant provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights.

4. On 26-28 October, the discussions of the CTE will include:

Items under the market access cluster (Items 2, 3, 4 and 6);

Items under the linkages between the multilateral environment and trade agendas cluster (Items 1, 5, 7 and 8);

- Item 9: the work programme envisaged in the Decision on Trade in Services and the Environment;

Item 10: input to the relevant bodies in respect of appropriate arrangements for relations with intergovernmental and non-governmental organizations referred to in Article V of the WTO; and

Report of the CTE to the General Council at the end of 1998.

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