Opinion of the European Economic and Social Committee on 'Sustainable development in agriculture, forestry and fisheries and the challenges of climate change'

(2006/C 69/02)

On 10 February 2005, the European Economic and Social Committee, under Rule 29(2) of its Rules of Procedure, decided to draw up an opinion on: Sustainable development in agriculture, forestry and fisheries and the challenges of climate change.

The Section for Agriculture, Rural Development and the Environment, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 9 November 2005. The rapporteur was Mr Kallio.

At its 423rd plenary session, held on 18 and 19 January 2006 (meeting of 18 January), the European Economic and Social Committee adopted the following opinion by 96 votes to 14 with 13 abstentions.

1. Introduction

- 1.1 In recent years climate change has become one of the most critical issues for the future of the planet. A huge number of studies have been carried out on climate change, which have clearly demonstrated above all an increase in atmospheric greenhouse gases, which are causing global warming. Changes in the composition of the atmosphere brought about by human activity are accelerating. International researchers agree that climate change is taking place, although there are different opinions as to how quickly. An assessment report by the Intergovernmental Panel on Climate Change (IPCC 2001) states incontrovertibly that the process of atmospheric change will continue over this century, accelerating global climate change.
- The EU and its Member States have been particularly active in pursuing objectives that would slow atmospheric warming. The Union has made many policy changes in different areas in order to achieve better results. The EU is at the forefront of international efforts to combat climate change, which is one of the greatest environmental, social and economic threats, and one that can have far-reaching and global consequences. The EU should step up its climate protection efforts and also seek to reduce greenhouse gas emissions from the agricultural, forestry and fisheries sectors in the light of its commitments to the UN Framework Convention on Climate Change and to the provisions of the Kyoto Protocol. This opinion attempts to provide important input into strengthening EU efforts in relation to climate change and its effects on forestry, agriculture and fisheries. It must be noted that to date research has contributed significantly to improving knowledge on the impact of climate change on forestry; however less scientific information is available on the impact on agriculture and a lesser amount still on the fisheries sector.
- 1.3 The international community has tried on the basis of several agreements, such as the Kyoto Protocol on Climate Change, to influence various policies so as to contain greenhouse gas emissions. However, implementing these agreements

has been very difficult because not even all the major signatories, such as the United States, have committed themselves to the widely accepted objectives.

- 1.4 Atmospheric warming has many effects, both direct and indirect, in different areas and sectors. Assessing all these effects is a particularly demanding task for research. A massive research effort is under way in different parts of the world. Numerous scenarios have been created for climate change. The effects on human and natural systems have been estimated on the basis of available knowledge. The effects will be either negative or positive, depending on the area concerned and the changes in conditions. The international community and the EU have focused in the first instance on reducing greenhouse gas emissions so as to slow the advance of climate change. Climate change is not just a matter for environmental policy, but also has major economic, social and cultural implications for the whole of mankind, and of course also for the development of the European Union.
- 1.5 As well as curbing climate change, the EU and other countries and regions should do much more to improve the ability of people and economies to adapt to the changes taking place. This is particularly important since even if climate change could be prevented in the long run, the changes that are already imminent will require major adjustment measures in different sectors of society, both at national and international level. Climate change will also have a significant impact on global economic trends and growth. The EU has presented its own assessments of economic and energy consumption trends.
- 1.6 Adapting to climate change is a major challenge for sustainable development in most economic sectors in the European Union. Climate change necessitates adjustments in at least the following areas: industry, energy, transport, construction, health, tourism, insurance, land use, biodiversity, use of nature for recreation, water resources, fishing, forestry, agricultural, livestock and food production, as well as hunting and reindeer-husbandry. A climate change adaptation strategy must

EN

therefore be drawn up in the EU and the Member States. In this own-initiative opinion the European Economic and Social Committee wishes to present further ideas for developing the adaptation strategy in the EU, notably in relation to the primary industries of agriculture, forestry and fishing.

1.7 The threat of natural catastrophes such as floods, gales and hailstorms, which will increase in number as a result of the anticipated climate changes, will have equally negative consequences for the agricultural, forestry and fisheries sectors.

2. Changes and adaptation needs in EU agriculture in response to the climate change process

- 2.1 In view of the anticipated effects of global warming, there is every reason to expect that they will be felt particularly heavily in agriculture and forestry and to some extent also in the fisheries industry. Given the modest contribution these sectors have made to greenhouse gas emission, their role has been of marginal importance to date in the drafting and implementation of European climate change policies. According to IPCC research, climate change is unavoidable; it is therefore vital to look at these sectors from the perspective of the necessary adaptive changes.
- 2.2 The European agricultural, forestry and fishing models should be based on sustainable production of renewable raw materials and products for consumers and industry. The EU has invested heavily in the quality of food and other products and in safeguarding quality. Maintaining the targets and results achieved will require new measures to adapt to climate change.
- 2.3 Climate change affects food production, access to water and health in the EU and throughout the world. In the northern regions of the EU atmospheric warming will cause crop yields to rise, while in the south harvests will shrink because of increasing aridity. The speed and forms of climate change will vary across EU countries and regions, but for now, at least, there is a clear warming trend. Both drinking and irrigation water are becoming more difficult to obtain in southern regions.
- 2.4 Extreme weather phenomena storms, floods, droughts and prolonged heatwaves will increase. Global warming increases the risk of insect- and water-borne diseases spreading. Climate change also affects the incidence of these problems in different countries and regions.
- 2.4.1 The focus of food production in the European Union will shift further north in the longer term. It is assumed that

climate change will widen the prosperity gap between developed and developing countries, which will also have an impact on food production and markets. It is quite conceivable that climate change will lead to food shortages and conflicts over access to food in some regions. It is important to take account of the fact that climate change can lead to serious disruptions in access to water resources.

- 2.4.2 The EU will be better able to cope because of its good infrastructure and the agricultural policy goal of maintaining production across the Union. In this changing situation it is essential that the EU should be able to maintain adequate instruments and resources to develop and safeguard its own food production.
- 2.5 The EU has not framed a clear adaptation strategy under its agricultural policy that would respond to the already inevitable consequences of climate change. Some Member States have drawn up or are drawing up national strategies for adapting to climate change. European agriculture is basically quite well placed to respond to climate change, as for instance the adaptive capacity of crops is generally good.
- 2.5.1 It is possible by developing new plant varieties to meet the demands of climate change within a few years. The diversity of genetic resources can be tapped to facilitate adaptation. Businesses should increase funding for developing new technologies, in both plant and livestock production. An adequate risk management system should be developed to reduce damage caused by weather variations and plant and animal diseases.
- 2.5.2 It is also necessary to step up research in the agricultural sector to develop new varieties that are more adaptable to new ecological conditions (adaptation) or which do not require such large inputs of, for example, nitrogenous fertilisers (emissions control). University courses and research relating to climate change should be strengthened and broadened, in both basic research and research on climate change adaptation.
- 2.5.3 However, the key issue is to preserve the overall fertility of the EU's agricultural land. Detrimental changes taking place in the soil can be mitigated by developing new farming practices. One critical question for agriculture will be the substance of future water policy, especially in those regions where water shortages are becoming an increasing problem.
- 2.6 The effects of climate change on global food markets require further study, since market changes also impact on the EU's own production targets.

- 2.7 The European Union has introduced several environmental policy measures affecting agriculture, with the aim of reducing greenhouse gas emissions. The EU has also tried to direct agriculture towards production of bioenergy crops, which would have a positive impact on environmental and climate policy. The EU should develop new environmental measures in agriculture aimed at making more efficient use of fertilisers and preventing as far as possible production of methane by cattle or promoting its recovery. Thus changes in EU agricultural and environmental policy will influence the future level of emissions.
- 2.8 In this new situation cultivated land should be used more than it is at present for non-food production. Use of biofuels is still very low in most EU countries. Production must be increased substantially if the target level set by the EU for use of biofuels is to be reached. The EU should change certain rules restricting the production of energy crops, such as the hectare ceiling for aid and use of set-aside land for non-food production. Bioenergy can be justified on grounds of employment, diversification of energy production and its positive effects on climate change.
- 2.8.1 The EU should allow agriculture to play its full role as a producer of biofuels, so that the EU can come closer to achieving the objectives of the Biofuels Directive. The EU should reconsider the possibility of adapting certain CAP rules and reappraise the content of the WTO's Blair House agreement, which limits the production of oilseeds intended for non-food production and grown on set-aside land. The EU should remove this constraint as production aid is no longer granted for oilseed production.
- 2.8.2 Adapting to climate change necessitates coordinated cooperation along the whole food production chain, at both international and EU level. The process of adaptation is also a big challenge for consumers, for whom an effective information and publicity effort should be mounted. The EU and the Member States should organise a coordinated training, information and publicity campaign to increase the general public's basic understanding of complex climate change processes.

3. Need for adaptation in fisheries as well

3.1 EU fisheries policy has focused mainly on managing fish stocks and controlling markets. Concern about changes in water quality obviously also affects fishing. EU fisheries policy has not made any specific allowance for climate change effects. But EU climate change guidelines note that over the long term climate change will have an impact on the fishing industry

- across Europe and in certain regions. The EU believes that it can adjust and adapt to future changes. According to present knowledge, a climate-induced increase in water temperature will probably not produce major changes in large seas. In contrast, the impact will be more significant in smaller water bodies such as ponds, rivers and lakes. It is likely that fish stocks will change significantly as a result of, among other things, changes in the food supplies of fish. Various new fish stocks may enter the warmer waters and others may disappear.
- The changes may be greater in the inland and coastal 3.2 waters of the northern EU countries. It seems that quality coldwater fish may become endangered. There will clearly be a decrease especially in economically valuable fish such as salmon in the EU's northern regions, and an increase in less economically valuable coarse fish. The ability of different fish species to adapt also varies widely. Obviously the rate of climate change and how it affects water bodies are of key importance. The general trend of climate change means rising water temperatures, and there is already scientific evidence of this in, for example, the polar regions and the bogs of Siberia. On the other hand, the marine ecosystem responds relatively flexibly to climate change effects. The situation is a lot more problematic in the case of rivers and lakes, but here only scant research is currently available on climate change adaptation.
- 3.3 Aquaculture opportunities may improve as a result of climate change. The volume of water will grow in the future, increasing the total area of coastal waters and making it possible to expand aquaculture. The rise in the temperature of the EU's northern waters will also increase fish food stocks. At the same time, the higher water temperature may increase the risk of disease and quality impairment. Changes in water temperature will have not only economic consequences but also natural consequences, above all by limiting biodiversity.
- 3.4 The sustainable development of fish stocks should be based on knowledge and research. It has often been very difficult to manage and implement EU fisheries policy. The sector has faced considerable challenges and pressure, such as profitability and dioxin problems, and regulation of fishing. The adaptive capacity of the fisheries sector could also be improved by reducing harmful human activities that cause eutrophication and lower water quality. Fishing is an area in which there is a great need for climate change studies. Water ecosystem processes are very complex, which presents a considerable challenge for research. The EU could provide additional funding for such work and step up its multilateral international research activities and cooperation.

4. Need for long-term strategies in forestry

- 4.1 The EU's forest resources are growing steadily. Only half of the annual increment is cut while new afforestation programmes are creating additional forest reserves. The carbon stored in forests and in wood is the most important carbon sink after oceans. At the same time, wood-based products function as a substitute for products made with non-renewable resources. European forestry policy falls within the competence of Member States. EU legislation and international agreements have an increasing impact on European forestry policy. The Ministerial Conference on the protection of forests in Europe (MCFPE) has established criteria and indicators for sustainable forestry which serve as a key reference point for the sustainable use of forest resources. The EU should support this process within the framework of sustainable development, whilst nevertheless respecting the subsidiarity principle.
- 4.2 Well-managed forests provide the basis for opportunities to adapt to climate change. EU forests are for the most part managed on an ongoing basis and are thus able to sustain high production levels and retain their vitality. The long time horizons in forestry, with rotation periods of between 15 and 150 years, mean that any adaptation measures should begin as soon as possible. Particular attention should be paid, at the present point in time, to restocking methods, including the selection of tree species. As climatic conditions are likely to change markedly in a relatively short time period, Europe's forests will become more vulnerable to insect damage. The EU should foster improved cooperation between national forest management authorities and stakeholders to prepare for major threats from biotic organisms such as insects and fungi.
- 4.3 There is a wide variety of forest types in the EU. European forests can be divided according to geographical location into the Boreal, Atlantic, Continental, Mediterranean, Alpine and Macronesian forest zones. The biotic differences between these zones are enormous. When devising a climate change adaptation strategy for primary industries, the strategy for forestry should be drawn up at national or regional level. Forests play an important role as a significant stabilising factor in Europe's natural ecosystem and their maintenance will have a decisive impact on the stability of the continent's natural and semi-natural ecosystems.
- 4.4 Climate change has already increased and is expected to further increase the number of natural catastrophes. In the case of forests this means more forest fires, storm damage and widespread insect damage. In order to be able to cope with such crisis situations, the EU should take steps to quickly mobilise support, and adequate material and financial assistance should be ensured through, for example, the EU Solidarity Fund or similar instruments.

- 4.5 In view of the high vulnerability to biotic pollution, the EU should maintain its strict policy with regard to inspection of imported roundwood and wood-based products from outside the EU. This is an effective way of protecting European forests from harmful alien species, such as certain insects and fungus species. Import checks must not lead to the setting up of unwarranted barriers to international trade.
- 4.6 Forest fires are already a considerable problem, particularly in the southern parts of the EU. Since climate change is expected to exacerbate the situation, it is essential that the EU build on its existing work in the area of preventing and containing forest fires and developing European risk management plans.
- 4.7 Thanks to sustainable forest management, the EU's forest potential is growing steadily. Wood is a renewable natural resource and promoting its use in society as a building material and a source of energy is the most effective way of locking up carbon dioxide in trees and wood-based products, which function both as carbon sinks and a substitute for materials based on non-renewable resources. In many countries, increasing the use of wood offers one of the few opportunities to create new jobs, especially in the countryside. This applies particularly to the generation of wood-based energy, which is highly labour-intensive and is often produced by local entrepreneurs using simple heating equipment.
- Forest management is based on a complex biological system, the study of which takes a long time, in part because of the long lead times involved. Infrastructure and logistics systems of various kinds are one of the keystones of economically viable forestry. Climate change is expected to lead to drought in the south and wetter ground conditions in northern regions, implying the need to develop forest machines which can perform effectively without having a major impact on the soil surface, for example when the machines are being operated, and to invest in basic biological research. In order to be able to maintain the European forestry model and adapt to changed climatic conditions, the EU should ensure adequate funding for research and development in this sector. The Forest-Based Sector Technology Platform, which has been established as part of the preparations for the Seventh Framework Programme for research, should be noted. Collaboration between research bodies across Europe and worldwide should be facilitated.
- 4.9 Economically viable forestry is a sine qua non for ensuring that private and public forests in Europe are properly maintained and kept healthy. The EU should recognise the forest sector as an independent sector in all legislation and always assess the consequences from this standpoint so that rules which run counter to this view are not laid down unintentionally.

- 4.10 Original tree species are better able to adapt to local climatic changes, inter alia, because of their genetic composition. Preference should therefore be given to native tree species whilst at the same time attempting to introduce certain species in more northerly locations in Europe. In addition, mixed forests should be recommended where this is possible.
- 4.11 Climate change will in all likelihood further widen the economic disparities between the industrial and developing countries. The EU should support efforts to establish a globally binding forest convention incorporating adaptation strategies which could help to steer development in many developing countries. Capacity building and governance are needed to safeguard important forest resources around the world. The Clean Development Mechanism (CDM) established under the Kyoto protocol is an incentive for EU actors to contribute to afforestation in third world countries and a means of increasing EU efforts with regard to the carbon dioxide quota system in developing countries.
- 4.12 Climate change has a major impact across the EU and on different communities. Educational, training and informational measures and public debate should be stepped up substantially by the Community so as to enable citizens to gain an in-depth understanding of how significantly climate change impacts on the future of EU forests.
- 4.13 Climate change may also entail positive consequences for forestry, at least in the short run. This applies particularly to the northern parts of Europe where there is already a modern, highly-developed independent forest sector. The effects of climate change should be taken into account in forestry development measures across the EU.
- 4.14 The production of cork and non-wood based products such as berries, mushrooms, and environmental services should be given careful consideration in the analysis of future changes. In addition to cork, management of game reserves is an important part of today's modern forestry and sustainable development.
- 4.15 The EU's 1998 Forest Strategy and the action plan currently under preparation by the Commission should take account of climate change and propose the measures that need to be taken, to help further the mobilisation of wood resources. The Commission communication and European Council conclusions have identified adaptation of forestry to climate change as a key objective. It is essential that in this process effective and close cooperation should be maintained between the various Commission DGs, the Member States and stakeholders.
- 4.16 The EU must try to ensure that a degree of flexibility is incorporated into international agreements and forestry programmes so that, for example, in emergencies areas of woodland can be felled when the health of trees deteriorates and they would be seriously damaged by insects. This would

allow the rapid re-afforestation of the afflicted areas with the most appropriate tree species.

5. Conclusions and recommendations

- 5.1 The EESC considers climate change to be the biggest challenge facing the European Union and the entire planet over the coming years and decades. The EU must significantly step up efforts to combat climate change and begin drawing up adaptation strategies in a consistent way for various policy areas. Future presidency countries must devote increasing attention to extending climate change policy to include also adaptation measures.
- 5.2 The EESC believes that rural industries, agriculture, forestry and fisheries have made only small contributions to greenhouse gas emissions, as a result of which these sectors have been overlooked in EU climate change policy. According to research by the Intergovernmental Panel on Climate Change (IPCC), climate change is unavoidable and it is therefore important that the EU also prepare the ground for adaptation measures in these sectors.
- 5.3 The EESC feels it is essential that the Union substantially increase research resources for analysing climate change and adaptation policies and for the implementation of security programmes. This applies particularly to industries based on natural resources.
- 5.4 The EESC requests that all of the EU's cultivable fields be kept fit for production. From this perspective, the EU must step up efforts to improve food security and security of supply. The uncertainties of climate change for these primary industries must be specifically taken into consideration when planning future EU policy on agricultural support and production, trade policy and energy policy.
- 5.5 The EESC calls for the EU to use international forums to highlight the adverse effects of climate change from the point of view of fighting world famine, which has obvious implications particularly for developing countries in equatorial regions.
- 5.6 The EESC believes that, in addition to combating climate change, there is a need for the EU and all Member States to begin the preparation of sectoral adaptation strategies. Such strategies have already been drawn up in some Member States. The Union can contribute to this work by bringing the benefit of good coordination and the support of international agreements, which would also help to intensify efforts to this end at global level.
- 5.7 The EESC considers it important to study the knock-on effects of climate change on rural industries. Climate change also has major implications for other sectors (industry, energy, transport, tourism, health), with indirect effects on the development and adaptation needs of rural industries.

- 5.8 The capacity of the EU and Member States to assess the implications of climate change for fisheries is fairly poor. Efforts in this area are crucially linked to the future development of water resource management. Fisheries policy will also have to assess the adjustments the sector needs to make to adapt to changes in water resources and fisheries conditions.
- 5.9 The EESC believes that the production and use of wood resources should be increased and that the role of forests in containing climate change should be taken seriously. The EESC

Brussels, 18 January 2006.

feels that it is important to increase afforestation, both within the EU and globally. This should also be the key focus of EU development policy.

5.10 The EESC suggests that the Commission propose the launch of a wide-ranging information and education campaign within the EU and at international level, with a view also to raising awareness among civil society players and political decision-makers. This could help to speed up the preparation and introduction of adaptation strategies.

The president
of the European Economic and Social Committee
Anne-Marie SIGMUND

Opinion of the European Economic and Social Committee on the 'Report from the Commission to the Council, the European Parliament and the European Economic and Social Committee on the rates of excise duty applied on alcohol and alcoholic beverages (presented pursuant to Article 8 of Council Directive 92/84/EEC on the approximation of excise duty on alcohol and alcoholic beverages)'

(COM(2004) 223 final)

(2006/C 69/03)

On 27 May 2004, the European Commission decided to consult the European Economic and Social Committee, under Article 262 of the Treaty establishing the European Community, on the abovementioned report.

The Section for Economic and Monetary Union and Economic and Social Cohesion, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 8 November 2005. The rapporteur was Mr Wilkinson.

At its 423rd plenary session of 18 and 19 January 2006 (meeting of 18 January 2006), the European Economic and Social Committee adopted the following opinion by 81 votes to 33 with 15 abstentions.

1. Summary of Conclusion and Recommendations

- 1.1 The current system of taxation on alcohol and alcoholic beverages is not working in accordance with what consumers have a right to expect from the internal market but the Member States (MS) have not agreed to harmonise the excise rates applied to these products beyond the current agreement on minimum rates. Excise is the term used by trade experts to denote the tax payable in the country of consumption.
- 1.2 The frequency of reports on the current system by the Commission should be made more realistic by requiring them no more frequently than every 5 years.
- 1.3 The current system regularly raises problems over the place of certain products in the currently agreed structures to which there is no simple answer; this can lead to each MS finding its own solution. Problems also persist over the correct

coding in the Common Nomenclature. There are two major categories of trade in these products to be taken into consideration: trade between professionals and purchasing by private individuals, which can take the form of either direct or mailorder purchases, each of which raises separate issues.

- 1.4 Problems from the point of view of health are the result of the abuse of alcohol by individuals, not the form in which the alcohol is consumed.
- 1.5 Higher excise duties do not tackle the alcohol abuse problems that exist with individuals. There is no conclusive evidence that high rates of excise duty reduce the problems of abuse over the longer term. Consequently, other measures based essentially on education and prevention, must be employed in order to tackle these problems and improve public health.