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Mr Chairman,
Ladies and gentlemen,

It is my pleasure to welcome you to Brussels today to discuss the relationship between soil and climate change. The very large attendance of more than 400 people from almost all Member States and beyond, including at high political level is a clear reflection of the enormous interest in the subject. It shows an increased awareness of the need to address soil conservation and management in the light of climate change.

At the outset, I want to thank Mr Gnacadja, Executive Secretary of the United Nations Convention to Combat Desertification, for acting as today's Chairman. Mr Gnacadja will surely remind us that very low soil organic matter levels are among the key factors that contribute to desertification, and of the consequences of desertification for the lives of so many of the world's poorest people.

But why should we in Europe be so concerned by the relationship between soil and climate change?

The key is "soil organic matter". As you in this audience well know, soil organic matter is an extremely precious resource that performs essential functions for the environment and for the economy, and it can do so because it is a whole ecosystem at a microscopic scale.

Organic matter is a major contributor to soil fertility. It is the elixir of life, particularly plant life, as it binds nutrients to the soil, thus ensuring their availability to plants. It is the home for soil organisms, from bacteria to worms and insects, and allows them to transform plant residues, and hold on to nutrients that can be taken up by plants and crops. It also maintains soil structure, thereby improving water infiltration, decreasing evaporation, increasing water holding capacity and avoiding soil compaction. In addition, soil organic matter accelerates the break down of pollutants and can bind them to its particles, so reducing the risk of run-off.

But this is not all. Equally important is that soil organic matter is the second biggest carbon pool in the planet after the oceans. In the EU alone there are more than 70 billion tonnes of organic carbon in our soils. This is a huge amount if we bear in mind that the Member States of the European Union altogether emit about 2 billion tonnes of carbon annually. Indeed, releasing to the atmosphere just a small fraction of that carbon currently stocked in our soils runs the risk of wiping out all the savings that other sectors of the economy are achieving in order to contain anthropogenic greenhouse gas emissions. This is not a theoretical scenario, unfortunately, and some of the scientists who will speak here today will present data suggesting that large amounts of carbon from soil organic matter have indeed already been lost to the atmosphere in the recent past.

You may wonder, what is causing this loss of soil organic matter? This conference today will certainly provide some answers to this question but there appear to be several varied factors contributing to losses of carbon from soils.

Long term changes in land management practices driven essentially by changing economic circumstances may be among them. We have, for instance, over the past century or so, completely mechanised and streamlined many of our farming systems, specialising production and simplifying management. In making these changes, most of which have brought strong socio-economic benefits, we have taken our eyes off what is happening to soil. Land management approaches, largely not related to soil management, have played centre role in expanding productivity. It now appears, that slow and gradual reductions in soil organic matter may have taken place, almost insignificant in themselves at field level but very significant when taken as a whole in terms of carbon emissions. The atmosphere, of course, makes no distinction regarding the origin of carbon dioxide insofar as climate change is concerned.

This has to lead us firstly to examine thoroughly if and where soil organic matter is declining throughout our territories, then to establish approaches to redress the situation and to implement these approaches so that soil not only retains its organic matter but, – where possible – becomes a sink for more carbon and therefore contributes to the fight against global warming.

But long term changes in land management are not the full picture. Changes in rainfall patterns and increases in average temperatures brought about by climate change are also playing a role. A rise in global temperature accelerates carbon losses from the soil, driving up the concentration of carbon dioxide in the atmosphere. The changes in rainfall patterns will, of course, additionally contribute to an increase in erosion in vulnerable soils which often, themselves, suffer from low organic matter content. Climate change will thus put further pressure on soil quality and will increase the risk of desertification, which is already affecting the southern Member States and is expected to move gradually northward.

It is therefore more urgent than ever to act in favour of appropriate policies and practices that favour maintaining or even increasing soil organic matter levels. If we manage to do that – and we have to do it now! – we have at our disposal a formidable tool for sequestering carbon and supporting the achievement of the targets we have set ourselves to combat climate change. The more organic carbon we keep in or add to the soil, the less carbon dioxide we will have in the atmosphere.

This will not only mitigate global warming, it will also diminish desertification risks, thereby sustaining agricultural production and allowing us to keep feeding the ever growing world population. In this context, the current world food crisis is of particular relevance. The Commission recently presented a Communication on this subject acknowledging the many causes of the current problem. These include increased demand for commodities and decreased supply due largely to weather related production shortfalls in several regions of the world. Forecasts for future long term trends in climate all indicate greater droughts in some areas and more rainfall – even too much – in others. It is clear that we can expect weather related supply difficulties to reoccur in coming decades. Long term soil management has a role to play in countering such difficulties. Soil organic matter can absorb up to twenty times its weight in water and so can play a positive part in mitigating the impacts of more extreme rainfall intensity and more frequent and severe droughts.

Therefore, preserving and increasing soil organic matter levels to the extent possible can be a significant tool in mitigating climate change, securing our food supply, and combating desertification. And our efforts will not only improve the situation in Europe, as – I am sure – they will contribute to solving these problems at the global level as well.

Ladies and gentlemen,

Human actions taken without awareness of their long term global consequences are clearly at the root of climate change. The good news is that it is in our power to modify this situation and to address climate change! For soil organic matter, as our knowledge grows, we can develop the opportunities to take corrective action for the benefit of sustainable agriculture, for nature protection and to mitigate climate change.

For example, recent reforms of the Common Agricultural Policy have begun to take steps in this direction.

Moreover, it is partly for this reason that the Commission has proposed ground breaking legislation for soil. This aims – for the first time in the European Union – at protecting soil and the crucial functions it plays – including acting as a carbon pool. The European Parliament has understood fully the importance of the proposal and adopted it, strongly emphasising the need for protecting soils against the negative effects of climate change. Now the Council needs to move forward on this file, because we cannot afford to waste time and allow that more and more soil organic matter goes up – literally – in smoke. This is a problem with at least a European if not a worldwide dimension, which needs a European solution.

Furthermore, in autumn will present a White Paper on adaptation to climate change. It will show the importance of increasing the resilience of soil to climate change and how a healthy soil, sufficiently rich in organic matter, will allow our entire society and economy to better adapt to the impacts of climate change. I will ensure that the outcome of this conference will feed into the Commission's thinking on the relationship between soil policies and climate change mitigation and adaptation. I express the hope that you will do the same at the national or regional level.

I began by thanking Mr Gnacadja for acting as chairman; my thanks also go to the high-level European and non-European speakers who have travelled from as far as Brazil or the United States to come and present the results of their research. I am a believer in the need for policies to be based on sound scientific advice, and today's conference represents a golden opportunity for the scientific community to make its voice heard.

Last but not least, I would like to express my sincere thanks to the Members of the European Parliament, of the European Economic and Social Committee, to the President of the Environment Council, to the Portuguese Secretary of State and to the Environment Minister of Iceland for accepting my invitation to participate in the panel discussion that will close the conference. I am sure they will take stock of today's deliberations and will present their valuable views on the policy perspectives in front of us.

Ladies and gentlemen,

I firmly hope that this conference will bring to the attention of a wider audience the scientific elements that underpin the EU's action in the fields of soil protection and climate change adaptation and mitigation. I am confident that it will also prove to be an important milestone in the difficult road leading to a better understanding of the role that soil plays in the global ecosystem and the need for greater efforts to ensure and protect that role.

I wish you a very informative and constructive day, and thank you for your attention.