"Where Now – Post Copenhagen?"
The Right Honourable Chris Smith
Chairman of the Environmental Agency

This was the first joint Cirencester Science & Technology Society/Royal Agriculture College public lecture.
Lord Smith summarised a number of indicators that have been monitored by the Environmental Agency over the past 30 years, such as average river temperatures, geographical habitats of insects and birds and the number of openings of the Thames barrier, (as a result of more frequent tidal surges), all of which indicate a warming trend. However whilst there is an undoubted connection between these and the greenhouse gas problem, it is not possible to prove a direct link between them.

If the warming trend continues, sea levels will rise and availability of fresh water will be become increasingly important. In the UK we will need to find ways of storing excess winter rain to cope with increasingly drier summers although this will be a greater problem in southern Europe. We also need to reduce our water consumption – in Germany the per capita consumption is 110 litres/annum compared with 160 litres/annum in the UK. However the level of uncertainty on the scale of the environmental problem makes it very difficult to create and implement public policy.

Copenhagen was not the total disaster portrayed in much of the press, which made much of the unfortunate University of East Anglia affair and the errors in the IPCC report. These mistakes and disappointments should not detract from what needs to be done in the way of (a) Mitigation (i.e. trying to halt climate change happening and (b) Adaptation (i.e. coping with the consequences of climate change). However most countries have now signed an Accord, which recognises two key principles. The necessity of limiting a global temperature rise to a maximum of $2^{o}C$ and a duty of the developed world to help the developing world by finding and making available efficiency improvements and new technology. This will enable the world to adapt to the consequences of climate change whilst finding ways to stop or at least minimise it.

In the UK the Climate Change Act means that by 2030 all electricity production should be by nuclear, renewables or fossil fuels with carbon capture. Ideally all land transport should be electric and buildings energy efficient. Farming/agriculture will need to find ways of a) reducing its carbon footprint b) improving production and water usage and c) finding alternative crops to adapt to climate change including the use of GM crops since it will not be possible to continue our reliance on imported foods. There should also be a close examination of the environmental impact of heavy industries such as steel, cement etc. and also our waste policies.

Although it would be easy to think nothing can be achieved by Britain on its own, Lord Smith said that this would be the worst possible response and he believed that we could achieve much through the power of example.

In response to questions Lord Smith acknowledged that it took a very long time to implement technological changes. However a recent Price-Waterhouse international survey showed that most large businesses now accept that climate change is a reality and required a clear lead from Government together with additional regulation to speed up change. He also accepted that the US as still the biggest contributor to greenhouse gases was very unlikely to introduce stringent regulations. However he claimed that the US was far ahead of the UK in developing technologies to reduce the effects of climate change.

Given on Wednesday 23 June2010 at the Royal Agricultural College.