IMS's Sustainable Initiative and Policy Initiative

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To meet increased demand for meat, global production is projected to more than double from 229 million tonnes in 1999/2001 to 470 million tonnes in 2050. The bulk of the growth in meat is predicted to occur in developing countries. Food supply must increase sustainably to meet this demand and in this respect, could severely be constrained by climate change and other environmental impacts. Agriculture is a major contributor to greenhouse gas emissions, principally from methane and nitrous oxide but there continue to be uncertainties as to the precise contribution of the livestock sector with wide variation between systems of production. As countries enact policies to curb GHG emissions, the livestock sector will (irrespective of the uncertainties) be a key component of these policy strategies. Understanding how policy frameworks addressing climate change will affect the meat chain is thus urgent since an extensive public debate is already taking place. It is vital that this debate is informed by sound science to provide evidence based public policies and consumption recommendations.

The aim of the review of the review was to produce a global overview of the impacts that the meat and livestock industry, and in particular the red meat industry, will have on the environment. The review considered the role of livestock systems in sustainable agriculture, the meat and livestock industry and climate change, the contribution of the meat and livestock industry to greenhouse gas mitigation (i.e. emissions reduction) and supply and demand side perspectives in order to provide a road map for the industry to meet the challenges and in particular to define a role for IMS to support the industry

The industry will need to continue to deliver productivity gains while improving environmental sustainability, securing the livelihoods of those in the livestock industry and managing animal and human health risks. Livestock systems can both damage and benefit the environment and increasingly these costs and also benefits will be internalised and have a major impact on livestock systems.

There are considerable opportunities for the livestock industry both to meet demand and to make positive contributions to the environment. When properly managed, livestock can

sustain biodiversity and landscape and return nutrients to improve soil status. In relation to the contribution to reducing GHG there are win- win mitigation strategies that can benefit both profitability as well as reducing emissions. Increases in performance and efficiency through breeding and improved capture of nutrients from manures are two examples and the contribution of pastures to carbon sequestration needs to be recognised. In the future the industry will need to use existing (but sometimes restricted) and new technologies such as a new generation of growth promoters, breeding technologies and genetic manipulation to ensure food security as well as environment benefit.

It is essential that the industry engage closely with stakeholders and policymakers to emphasise the multiple roles of livestock in maintaining landscape and biodiversity, food security and livelihoods, particularly of the poor and to achieve targets to deliver ecosystem goods and services including environmental protection.

We suggest that IMS and the Industry support the following initiatives to achieve this aim

1) The livestock industry impacts both positively and negatively on social, environmental and public health targets. Given the significance of the livestock sector to agriculture as a whole, the IMS should play a leading role in securing an international framework for development of the livestock sector with a major focus on sustainability.

2) The livestock industry has large potential to contribute to environmental benefit. The IMS should work with relevant stakeholders to realise this potential and to enhance capabilities to monitor and report emissions from livestock production and in particular to derive more precise methods and improved models in calculating national GHG inventories.

3) There is considerable scope for improvements in productivity that deliver win-wins in terms of reduced productions costs and lower emissions. The sector should identify these measures and IMS should promote these measures as best practice.

4) Ultimately, GHG emissions are likely to be addressed by some form of carbon price, which in turn facilitates the use of market-based instrument like trading. IMS therefore needs to develop a position in relation to carbon pricing. Irrespective of the policy instruments chosen by government, retailers are likely to pursue niche

opportunities in low carbon product. Retail demand means that it will be increasingly important for producers to demonstrate certified emissions reductions

5) A similar constraint is likely to emerge in terms of adapting to climate change and specifically the use of water resources. While the volume of water used in production is contested and requires improved audits, the price of water is in most cases below the cost of supply (including its environmental cost). IMS might therefore consider the implications of alternative water pricing regimes

6) Research and development is now focussed on the delivery of low emissions livestock systems. Adaptation technologies and policy related research are also of high priority. The IMS should encourage members through their respective countries to input into, for example, the Global Research Alliance on Agricultural Greenhouse Gases to ensure that livestock emissions are centre place in the Alliance's work programme.

Finally the imperative of continuing a public debate is paramount and IMS should be closely involved in ensuring that the research agenda meets the needs of industry and to ensure that the public debate is based on sound science.