

## Policy Foresight Programme

Synopsis of the Seminar on

# The Futures of Agriculture

9 June 2006

James Martin Institute

University of Oxford

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The logo for the James Martin Institute for science and civilization. It features the text "JamesMartinInstitute" in a bold, sans-serif font, with "for science and civilization" in a smaller, lighter font below it. The text is white and set against a black background, which is framed by a yellow border.

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## Synopsis

On 9 June 2006, the Policy Foresight Programme at the James Martin Institute for Science and Civilization, conducted its first one-day seminar. The day was conducted under Chatham House Rules to allow for candid interaction by the participants. The topic was 'The Futures of Agriculture', and 22 people representing a range of interests and constituencies discussed three main questions:

- What works in current agricultural policy, both national and international? What is problematic and for whom?
- What might change in agricultural policy in the next 10-50 years?
- What should be done now and by whom?

There were four main talks, each of which are outlined below, followed by a review of the discussion that took place.

Colin Tudge spoke on *FEEDING PEOPLE IS EASY - or would be if the powers-that-be weren't hooked on seriously bad ideas*. Tudge pointed out that we are failing miserably to create a world fit for humanity and all other animals. He stated that current policies are inadequate for a number of reasons: food produced is largely of the wrong kind and in the wrong place; fresh water usage is far too high; and the reliance on monocultures is intrinsically vulnerable. The root cause of failure, Tudge claimed, is not that the task of catering for everybody is innately too difficult, but rather it is that present-day farming is simply not designed to feed people. Instead it is intended to maximize disposable wealth so as to conform to the dogma of global "free" trade.

Tudge suggested that present policies and ambitions are so far out of line with what is truly required that it will not be possible to change direction sufficiently just by reform: that is, by adjusting present policies and institutions incrementally. He argued instead for a renaissance in agricultural policies and practices, which he called 'enlightened agriculture'. The mantra of enlightened agriculture is to be rooted in morality and

common sense abetted by good science. Enlightened agriculture requires very high standards of husbandry and hence must be labour-intensive - the precise opposite of the modern trend, which is to cut agricultural labour as far as possible, and then some more. One possible way forward, Tudge offered, was the creation of a 'Worldwide Food Club' - a network of farmers, butchers, bakers, etc. that together could develop enough momentum to have governments and major players in agriculture either change their ways or wither on the vine.

In discussion the following points were raised:

- A comment was made that agriculture is not on the agenda of most governments, who are more concerned about other types of policy, such as the environment or energy. This was taken up by another participant who commented that energy prices will have a significant effect on agriculture and the food supply chain, from natural gas used in fertilizer to glass houses to processing, packaging, and distribution.
- Discussion also addressed what change Tudge envisioned and how it might happen. When asked to clarify, Tudge said he believed the percentage of a population devoted to agriculture should never be much lower than 20% or much higher than 50%. The current trend in the UK is to have less than 1%. A strong case was made by some of the participants for reforming the current system (as opposed to letting it wither). Arguments were made on both sides that either reform or renaissance would be too slow to adequately change people's habits and the system.

Sir Richard Packer gave the second talk on *Agricultural Policy in 2006 and beyond*. The basis for his argument was that demand, as expressed in the market place by free individuals, is the only basis for right policy and that exhortation will only get us so far. Focusing primarily on policy aspects that we can do something about, Sir Richard outlined three objectives of agricultural policy, 1) ensure the food supply is sufficient for everyone to get enough to eat, 2) agricultural policy should act in harmony with other policy, and 3) regard should always be paid to 'value for money'. He explicitly stated that such policy has no reference to standard of living for producers, needs of rural development, etc.

Agricultural policy, he argued, should be narrowly focused to be effective, and work with other policies to incorporate the broader perspective on issues of which agriculture is a part. In the UK, however, Sir Richard said the UK government sees little need for agricultural policy, believing the markets should rule. As the UK reduces agricultural support, it should enter into international negotiations to enhance trade. In terms of environmental concerns regarding agriculture, Sir Richard was in favour of regulations to

control pollution, but said that matters such as aesthetics and biodiversity are best dealt with by carrots rather than sticks.

In discussion the following points were raised:

- In response to a question about how farmers can still remain profitable once subsidies are removed, Sir Richard commented that potatoes, fruit, and vegetables are actually the most profitable crops and they are not subsidised by the Common Agricultural Policy (CAP). Opinion was divided, however, as another participant commented that if subsidies were removed, the farming industry, at least in the UK, would be decimated.
- With regard to biodiversity, comments included the need to maintain a diversity knowledge base on how to work with different crops. This includes having a diversity of crops in current cultivation, not just the seed banks that are currently in place.
- Participants pointed out the need to take account of health and safety in relation to agricultural policy (the most dangerous major industrial job), and that the biggest impact from local policies will likely be felt by other countries. Sir Richard replied to the latter by stating that there is a strong need for international negotiations on agricultural policy, and suggested that the appropriate place is the World Trade Organisation. This was met by replies from participants that such policy may be better developed by a world environmental organisation, and the largest oversight with the WTO, the International Monetary Fund, and the World Bank is that they trust too much to positive outcomes through a deregulated world market.

The third talk in the day was *Global Environmental Change and Food Security*, given by Prof. Diana Liverman. Prof. Liverman addressed the issue from the point of view of GECAFS, an international scientific programme on Global Environmental Change and Food Systems ([www.gecafs.org](http://www.gecafs.org)). GECAFS looks at how global changes such as climate change and land use change will affect the whole food system - which includes agricultural production as well as processing, packaging, distributing, and consuming food - and works with international organisations including the UN Food and Agricultural Organization (FAO) and the Consortium on of International Agricultural Research (CGIAR). She argued that climate change impacts should be assessed across the entire food system, and not only in relation to crop production, as is currently the case.

Prof. Liverman argued that we need to study the interaction between global environmental change, societal change, and humanity's ability to adapt in order to understand the vulnerability of the food system. While climate change will certainly affect yields because of droughts or rising sea levels, there are also significant human factors that affect food, such as loss of biodiversity and free trade policies. After outlining three food system projects GECAFS is running in different regions of the world, Prof. Liverman highlighted the importance of adaptation to climate change and the possibility of finding win/win links between adaptation and mitigation in the food system.

In discussion the following points were raised:

- Multiple participants commented on the need to address private sector involvement in developing climate change policies, particularly in relation to carbon trading and sequestration. Concerns were expressed about the challenges of carbon projects in developing countries including monitoring and benefits to local communities.
- Prof. Liverman mentioned that farmers in the UK are already preparing for a warmer world as a result of climate change.

The final talk of the day was by Andrew Simms on *Interdependence - Consumption, Food, and Global Warming*. He highlighted the size of the ecological footprint of the UK, and said that if the world were to consume at UK standards, we would need the equivalent of 3.1 worlds to accommodate the demand. While GDP in the UK has increased dramatically in the last few decades, lifestyle satisfaction seems to have levelled off, and this suggests that a change in policy is necessary.

Simms introduced the participants to the idea of an ecological debt calendar. If the UK were to live within its own resources, it would only last until 16 April before it began degrading the ecosystem beyond its limits to regenerate. Current global consumption patterns would only allow the world as a whole to reach 23 October.

In discussion the following points were raised:

- In response to a question about what Simms would do if he were in the government, he commented that we should focus on removing distortions in the market and that, as long as fuzzy parameters for markets are determined democratically, markets are very good at delivering outcomes. Returning to Tudge's earlier talk, Simms commented that we need to focus on changing the current system because, in order to get significant radical change at the world level, we would need a change of view that has only happened before through opposition to a very significant threat, such as after the World Wars.

- When pressed for how to develop policy for reducing resource use, Simms replied that there needs to be change in the cultural context, which is already happening. That should be combined with pricing models built, for instance, on the mean damage cost for a ton of carbon.

The discussion then moved into an open forum, where the issue of consumer behaviour modification was raised. One point was that consumers choose their preferences. For instance, while they used to compare 0-60mph times, they are now increasingly focused on miles per litre. How we can motivate this transition, however, still remained elusive.

The private sector's role in the future of agriculture was also the subject of much discussion. Some highlighted the possibilities for companies to change, such as by developing ways to predict consumer reaction to retailing behaviours. Others warned against too much involvement of the private sector, mentioning the privatisation of water in a number of countries. Others questioned whether the private sector policies were actually transforming agriculture or just green-washing, and opinion seemed divided on the matter.

Overall, it was clear that the issue of the future of agriculture represented in all of its complexity is not one that can be 'managed' in the traditional sense of the word. This does not mean that there is nothing that we can do. Rather, one person or way of addressing the issue is not sufficient. Therefore, a guiding principle for the development of future policies is that they should include a full range of tools - from market incentives to regulations to grass roots efforts. The day showed that each party in the issue will likely focus on only one of these tools, but it also showed that by discussing the trade offs between each of the tools - how much regulation versus what kind of markets or consumer preferences we want to foster - we are able to move discussion forward.

# Policy Foresight Programme

The Future of Agriculture seminar

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## Participants

Gundula Azeez	Soil Association
Sam Evans	Policy Foresight Programme, James Martin Institute
The Lord Haskins	
John Ingram	Executive Officer, Global Environmental Change and Food Systems
David Jones	Head of Food and Drink Industry Division, Defra
Dr. Ariane König	Research Fellow, James Martin Institute
Susan Lee	Secretary to the Policy Foresight Programme, James Martin Institute
Prof. Diana Liverman	Director, Oxford University's Environmental Change Institute
Tom MacMillan	Executive Director, Food Ethics Council
Sue Mayer	GeneWatch UK
Prof. Norman Myers	Green College, Oxford University & Adjunct Professor, Duke University
Dr. Roger Nourish	Head of Agriculture and Food Sector, Health and Safety Executive
Sir Richard Packer	Director, Arla Foods (UK) plc
Prof. Steve Rayner	Director, James Martin Institute
Nicholas Saphir	Chairman, OMSCo (UK Organic Milk Producers)
Dr. Mahendra Shah	International Institute for Applied Systems Analysis (IIASA), Austria
Andrew Simms	Policy Director, new economics foundation
Oliver Tickell	
Sir Crispin Tickell	Director, Policy Foresight Programme, James Martin Institute
Colin Tudge	Biologist and Author
Ruth West	
Dr. Derrick Wilkinson	Senior Economic Advisor, Country Land & Business Association (CLA)

## Policy Foresight Programme

The Policy Foresight Programme, part of the James Martin Institute for Science and Civilization, is designed to facilitate interaction between government, business, industry, the media, and academia on issues of science, technology, and the environment. The purpose is to identify leverage points in current policy that could have significant long-term benefits for civilization. Under the direction of Sir Crispin Tickell, the main activity of the Programme is to host up to six 1-day seminars, where around 25 people will engage in constructive debate to further integrative thinking on a particular issue. The emphasis of the seminars is to look anywhere from 10 to 50 years into the future to see what will be the major decisions we will be faced with then and what can be done now to direct policy along a resilient path. The Programme will cover all major areas of the James Martin Institute.