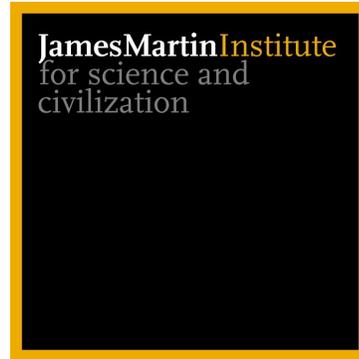


Policy Foresight Programme

Director: Sir Crispin Tickell



Record of the Symposium on

# Can Britain Feed Itself? Should Britain Feed Itself?

15 October 2008

James Martin 21<sup>st</sup> Century School

University of Oxford



THE JAMES MARTIN  
**21ST CENTURY SCHOOL**  
UNIVERSITY OF OXFORD

## Introduction

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On 15 October 2008, the James Martin Institute Policy Foresight Programme, together with Colin Tudge and LandShare, established in 2008 to promote Enlightened Agriculture, held a day-long symposium on "Can Britain Feed Itself? Should Britain Feed Itself?" at the James Martin 21<sup>st</sup> Century School at the University of Oxford. This document provides a summary of the day.

Sir Crispin Tickell chaired the day's events, and began by saying the purpose of the day was to bring together government departments, academics, business, civil society and policymakers, to promote discussion and support recommendations to the British government to create a more resilient and long term sustainable food system. Sir Crispin said that the future of agriculture and the problems of the global food chain and food security had now become of worldwide concern. These problems had to be seen in a new and broader context of rising world population, resource depletion, climate change, destruction of biodiversity, and damage to the natural world of which we were a small and vulnerable part. Governments had a prime responsibility to make sure that their people were fed. Market forces had to be exercised within a framework of the public interest. He drew attention to a recent speech given by Dr Rajendra Pachauri, Chair of the Intergovernmental Panel on Climate Change, entitled "Global Warning - The impact of meat production and consumption on climate change" at a recent conference of Compassion in World Farming, in which he had examined the world's growing demand for meat production and its links with climate change. Dr Pachauri had pointed out that "One kilo of beef is responsible for the equivalent amount of CO<sup>2</sup> emitted by the average European car for every 250 kms". Sir Crispin said we would also be looking at the links between food consumption and climate change in today's symposium. He welcomed all attending the symposium, and commended the outstanding work of Colin Tudge and others in this field

## Setting the Scene and Raising Key Questions

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### Colin Tudge

Colin Tudge set the framework for the day's conference. Food security had become a major international issue. Britain relied upon food supplies from elsewhere and too often had regarded agriculture as simply another economic activity. But in an uncertain political world in which global tensions and difficulties were increasing, we would find ourselves in increasing competition for diminishing natural resources. World wide depletion of top soils and waste of productive land brought about a need

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for a thorough re-examination of British agricultural policy in conjunctions with the wider implications of global food production.

Tudge said that we needed to restore the economic base of the British countryside. At present much of it was miserable and run down, with poor rural communities sidelined by town dwellers who bought second homes for the nice view from the window. We needed to restore the diverse natural environment, promote resilience to crop and animal diseases, revive vanishing country skills, and generally rebuild the countryside environment.

Tudge believed that the answer to the question Can Britain Feed Itself? (the subject of a book by Kenneth Mellanby in the early 1970s) was that we certainly could if we wished to do so. His reasoning was based on DEFRA statistics. His calculations were based on an allowance of 3000 calories per day per person, based on the assumption that to survive, an average man, who was not a labourer or an athlete, needed 2500 calories, the average woman 2000 calories, and small children less. It was calculated that 100 grams of wheat produced 350 calories and 1 kilogram of wheat provided 3500 calories. Therefore each person needed about a kilogram of wheat per day or its equivalent. This was the equivalent of one-third of a tonne of wheat a year. Average wheat yields in Britain had been around 8 tonnes per hectare in the last few years, and it therefore followed that one hectare of wheat or its cereal equivalent would produce enough energy and protein to feed 24 people. Working on the assumption that the British population would rise to around 70 million by mid-century, 70 million people at one-third of a tonne each would get all the energy and protein they needed from the wheat which could be grown on 3 million hectares. According to DEFRA the total area of agricultural land in Britain was 18.62 million hectares in 2007, of which 2.78 million hectares was cereal (of which 1.81 million was wheat, and the total wheat yield was 19 million tonnes).

Tudge said that in addition to wheat we grew 898,000 hectares of barley, and 129,000 hectares of oats, plus a sprinkling of rye, mixed corn and triticale. Barley provided roughly the same energy and protein as wheat with oats being slightly superior to both. In short Britain already produced enough cereal to support 70 million people. He conceded that a cereal only diet would be dull, and added that we also grew 140,000 hectares of potatoes and 1.17 million hectares of other arable crops (such as rape and sugar beet), and 169,000 hectares of horticulture, mainly vegetables but also fruit, and in addition we had some 10 million cattle, almost 34 million sheep, almost 5 million pigs, and 167 million poultry. He added that we had to take into account that half the wheat grown in the world (and probably more than half of what was grown in Britain), and nearly all the barley, was used to feed livestock, so the livestock figures could not just be added to the grain figures. Cattle and sheep also got a high proportion of their nourishment from grass and other fodders. If we had to, we could raise significant numbers of pigs and poultry even without growing cereals especially for them, simply by feeding them on leftovers and surpluses as was traditional. Put together, all these figures suggested that we could feed ourselves well on a good and varied diet. Exotic crops that could not be grown at home, such as bananas, coffee or cinnamon could be acquired by trade, as is traditional, provided only that the trade was conducted fairly. Self-reliance did not mean siege economy.

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Tudge added that if Britain could be broadly self-reliant in food, then most other countries, with only a few significant exceptions, could do likewise. The question was whether it would be wise for them to do so. In fact nation states were not the ideal units for self-reliance. Bio-regions would probably be better basic units. But the concept of bio-regions would create enormous difficulties and would involve redefining country boundaries and the whole global economy. What had to be borne in mind if defining bio-regions was that agriculture was above all a local craft. Much as we might like to grow what we would like, where and when we would like to, the role of science should primarily be to assist the long term sustainable productivity of global agriculture in a way that reduced carbon footprint, rather than simply to boost yields. There would be obvious institutional roadblocks to creating bio-regions, from within international global institutions, national governments and world wide corporate vested interests. What was needed was a kind of global renaissance in agriculture. Only such a turn around would enable us to feed a world population of as much as 9 billion. At the moment we were failing to feed 6.5 billion because the system was in disarray.

Tudge turned to issues of organic agriculture. Organic farming in this country in its modern form was still a new craft and sadly very under financed and researched. At present, organic yields were only about half as high as conventional yields, but with improved research and development it should be possible to significantly raise organic yields. Much could be done to develop what has been called "transition technology" to improve and extend organic farming. Colin Tudge favoured a route which was not strictly organic (except here and there for specialist purposes), but which regarded organic, as now defined by the Soil Association, as the default system, whilst at the same time developing "transition technologies". At present the British diet was heavily meat-orientated, and the world's becoming more so. But it did not have to be. Traditional diets all over the world were generally low in meat. But Asia and China were now demanding western style diets which included much higher proportions of meat. Many argued that greater reliance on vegetables in our diets would be much healthier. What was lacking worldwide was a proper food culture, and a true appreciation of what good food really was. In this connection he praised the work of the slow food movement.

In conclusion Tudge hoped that at this meeting we might discuss how to encourage a new research agenda for Britain which would promote longer term sustainable use of productive agricultural land. and to consider whether a new organization or a new institute could be set up to support what he called Enlightened Agriculture.

In discussion, the following points were made:

- The last 60 years of highly-funded government agronomy had focused on producing higher yields in conventional chemical farming. If the funds had been otherwise used to promote a more sustainable system, instead of quick profit, it could have promoted more overall sustainable food systems which would have conserved top soils and maintained something like traditional country life.

- The present world wide credit crunch was a defining moment causing all kinds of rethinking. It was a good moment to instigate much needed changes and to right some of the wrongs of the system. It was crucial that young people should have better access to farming land, and could make a living thereby. Country folk were up against corporate buying power which meant that land values were often far beyond their means and land was taken away from agricultural use. There should be 'protections' set up for land use, such as those in Denmark, where people could only own farms, or farmland, if they farmed it.
- More definition of what helped or hindered access to affordable countryside land was necessary.

## Future Food Supplies: Is Self Reliance Desirable?

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### Professor Tim Lang

The next speaker was Professor Tim Lang Professor, of Food Policy at City University. He said that in the 19<sup>th</sup> century, when Britain ruled the waves, British governments had favoured trading food in from elsewhere, and had purposely avoided any effort to establish self reliance. This policy came to grief in World War II, and after World War II. Whitehall had consistently displayed a nervousness in policy decisions about what constituted a good food system. It was clear that a good food system should be able to deliver consistent yields in good times, and be resilient enough to withstand shocks to the system such as adverse weather, limited water, energy costs and distribution difficulties. Successive modern governments had not regarded self sufficiency as a desirable aim, and this view had been consistently set out in a series of reports and official papers from the Cabinet Office, the Treasury and DEFRA.

The British food system was fairly resilient but there were inherent weaknesses in the system which made us vulnerable. Our reduction in grain and food storage capacity, our dependencies on unreliable foreign fuel supplies, lorry strikes, world tensions, economics, all presented real threats to our present food system. In the wider global context of rising world populations, land depletion, loss of biodiversity and climate change issues together with a general decline in world resources had started to bring the issues of food supply to the top of many government agendas . New multi-criteria fundamentals were needed to redefine the tasks associated with providing a good food system, not only here but world wide. Here in Britain we needed a complete overhaul of countryside policy. The government was setting about this task, and much good work as to what constituted a good food system and how Britain should respond to the challenge had been commissioned. It was recognised that among a myriad other

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problems, present policy enabled agricultural land to be acquired for many of the wrong reasons: that local folk too often could not afford to keep their farms; that there was a long decline in local communities and loss of traditional skills; that CAP directives had left the land depleted and neglected; that carbon emissions from land use had to be considered when choosing the kind of farms required (whether they be arable, livestock, dairy, food or fuel, organic or conventional, or agro-forestry) and that animal welfare and consumer choices and supermarket choice-editing had to be considered. All these matters had to be thought about in partnership with public approval because if policy did not carry such approval then it would be unenforceable. All this was under scrutiny and the weaknesses were gradually being identified and addressed. Government was poised to re-shape the food system and strengthen food security.

The arguments against British self sufficiency were our comparatively high production input costs and high energy costs as set against other food productive systems on the continent and elsewhere. British production of fresh fruit and vegetables for instance remained consistently low and cost more to produce, when compared with European products. Apart from the politics of self reliance the government recognised that the countryside had much else to contend with from emerging competing positions. It remained uncertain about what a good food system was in the light of both optimistic and sobering multi criteria analysis. Comprehensive criteria was now available. The next hurdle was to get the various cultures to accept the changes necessary. A closer look at all aspects of countryside life was being taken.

For the world as a whole there was enough food, and the main problems were of distribution. The current financial crisis was an opportunity to rethink policy as a whole

The following points were made in discussion:

- the current financial crisis made people think again about farm policy and human health. Some restrictions on food during World War II had actually made people healthier.
- home cooking had declined so much in some households that some were uncertain what staple foods really were, and what households should keep in store.
- scare mongering about the prospects of climate change and its effects on agriculture required a calm and non polemical approach. Public awareness of the issues was growing.
- recent demand for allotments had grown exponentially and sales of vegetable seeds had exceeded flower seeds last year.
- the general campaign against junk food had already caused a policy shift and in Wales access to it seemed more limited than in England

- the opportunity for working out more rational food policies had to be seized in the vacuum of the credit crunch. Agricultural policies were connected with the interests of many financial institutions in promoting eco-technologies and eco-health generally.

## Technical Briefing: Is Self Reliance Possible?

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### Simon Fairlie

Simon Fairlie said that Britain imported nearly 40% of its food and nearly all of its energy. He based his presentation on his own article in this winter's publication of **'The Land'** entitled 'Can Britain Feed Itself'. In it he had collated information to make comparisons between land use to produce different diets under different supporting agricultural regimes. All the figures were based on DEFRA 2005 production figures. The different diets and regimes were as follows: Chemical conventional with Livestock; Chemical Vegan; Organic Vegan; Organic with Livestock; Livestock Permaculture; Vegan Permaculture.

He used the Scottish ecologist Kenneth Mellanby's statistics for a *'Basic Diet 1975'* as a base from which to build his statistical evidence. Using conventional chemical farming, the population of Britain in 1975 was 53 million and we grew 15 million tonnes of cereals on less than 3.6 million hectares, at an average yield of 4 tonnes a hectare. Mellanby took as his starting point the UK's total figure for grain production in 1975, divided it by total hectares of arable land, and broke it down into yield per tonne per hectare. Then he divided that into kilos per person per year, and that into calories per kilo per person per day, taking an average of 2,700 calories as being a comfortable calorie intake per individual per day. Working from that figure Mellanby had built up a more varied diet, subtracting grain from the total as he introduced other foodstuffs. Mellanby's Basic Diet of 1975 fed 10 people per hectare of arable land, plus one hectare of pasture.

Simon Fairlie's six comparison tables arrived at the following conclusions: Chemical with Livestock would feed 14 people from one hectare of arable land, plus 1.5 hectare of pasture; Chemical Vegan would feed 20 people from one hectare of arable land; Organic Vegan would feed 8 people from one hectare of arable land; Organic with Livestock would feed 7.5 people from one hectare of arable land, plus one of pasture; Livestock Permaculture would feed 8 people from one hectare of arable land, plus 0.8 hectare of pasture supplies; and Vegan Permaculture would feed 8.5 people from one hectare of arable supplies.

The main conclusion to be drawn from this exercise was that organic livestock-based agriculture, practised by orthodox methods and without supplementary measure, had the most difficulty sustaining the full British population on the land available, while other management systems could do so with a more or less comfortable margin.

Simon Fairley said that it was an area of research that merited a much deeper and more thorough examination by experts. He was only able to give us the bare bones of his work so far, and asked that his figures be taken as a rough guide and for a useful framework for thinking about such matters.

In discussion the following points were made:

- the Soil Association had yet to comment on these calculations but they thought it was an important exercise and further research needed to be done on this work.
- research into organic agriculture was in its early days. Further research would result in changing husbandry and improvement of productivity
- we had to make better use of our land with recognition of regional variations. Other countries were already ahead of us, both in accounting for their ecological footprint and in production. Multi-use of land was operated in other parts of the world successfully, and these various diet systems could bring multi-use of land back on to the British agenda.
- "enlightened" land use would create a better balance between human needs and protection of wild life.
- agro-forestry with coppice rotation was a good example of an agricultural system which promoted harmony of human cohabitation with the needs of biodiversity and wildlife.
- the good health of the land was tied to the good health of agricultural communities. Land laid waste owned by such institutions as county councils and public trusts should be released for agriculture to include more local production. Urban communities were making some headway on this front.
- at present we used other people's land elsewhere to reduce our carbon emissions. This raised a host of international issues, including security of supply, food poverty, use of subsidies, and the reform of the common agricultural policy.
- Crofters were highlighted for their appropriate use of land. A lot of land didn't support arable, so the use of cattle and sheep made more sense on such land. Biodiversity went up and hill-land was used, and not left to waste. Even forestry was not always appropriate as many Scottish landscapes could not get timber off the land. But the small income drove people off the land. Crofters should be subsidised to stay on the land and farm it to keep it from going to waste and to preserve traditional and cultural knowledge.

## Food Systems: Role of Organic, Role of Local

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### Patrick Holden

In March 2006 Patrick Holden (Soil Association) said he had heard a presentation about peak oil by Rob Hopkins at Schumacher college. He found it a mind changing experience and thought that Rob Hopkins's ideas were a conductor for change at a critical moment. Climate change had until that point made him feel overwhelmed and helpless but Rob Hopkins' case for changing from fossil fuel dependency had made him feel empowered. Patrick Holden went back to his farm and immediately did an oil dependency audit. He realized he was so vulnerable to sudden interruption of supply of fossil fuel in every area of his production that his system could grind to a halt within a day. He set about turning his farm dependency on fossil fuels around and calculated that a preparation time of 10 to 15 years would be needed. These changes are now on going on his farm. Apart from reducing his dependency on oil, the measures would drastically reduce his own carbon footprint, and that of his 60 Ayrshire dairy cows. He then worked on making more fossil fuel resilient systems of getting produce to market. This led to much bigger and wider thinking culminating in calling his first 'Transition' meeting to which 450 people came. The Transition Cities movement had now grown to 30 Transition Towns in Wales alone. He saw the future role of the Soil Association as bringing people together with this new thinking. There was growing interest from non producers to reach out to the producer community. The social cultural element quickly followed with barn dances and cheese and wine parties rejuvenating these country communities. The next level was how to reconnect rural communities and urban communities. In London and elsewhere local food production was being organised and these communities were increasingly becoming a voice to be heard in government circles. In Wales for instance they were about to lobby the Welsh Assembly Government to do something about railways. In Switzerland food traveled on trains.

Beyond Organic: the underlying assumption that everything in Transition Towns should be organically - and chastely - produced was beginning to widen into a new concept of 'Transition Farming'. The Soil Association's next annual conference had made Transition food and farming its theme with a kind of war plan based on re-localization with use of local agricultural workers, local re-skilling training and fossil free transport elements. Then there were plans to combine local with international trading to support supply of exotic goods such as coffee, tea, fruits and spices. Goods could be internationally traded using sustainable methods and transportation. This all added up to an enormously pioneering vision of a national and an international resilient food system. This new food system would ideally have organic farming at the heart of it, with an aim of putting 50% of Britain farmland into organic production, supplemented by Transition technology. The government was well aware of how people were taking food production and supply issues into their own hands and finding ways of filling the gaps in legislation to enable a different way of living.

A remarkable amount had already been achieved and the movement was growing. Pressure from bottom up for change had swollen exponentially over the last few years.

In discussion the following points were made:

- most people did not grasp the significance of how dysfunctional present conventional food systems were.
- although efforts were being made to cope with such single issues as climate change by local councils, they often did not yet know how to act on fossil free energy issues. Governments had to work out different systems for the whole food chain which at the moment depended on cheap oil. Total radical reorganization of agricultural policy was more than ever necessary.
- major players in the system such as supermarkets and other retailers acted to protect their own short term interests. Supermarkets edited consumer choices. When looking at growth areas they tended to base them on sprawling suburbs, not condensed pedestrian areas. Green shoots for change, such as Transition Towns, were emerging. However uncertainty prevailed over policy and the future of the whole agricultural economy seemed in limbo.
- A recovery of countryside life needed to go hand in hand with a new food delivery system.

## Social and Economic Scenarios for Future Food Systems

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### Hardin Tibbs

Mr Hardin Tibbs's presentation was on a variety of future food system scenarios. He said that he specialized in long term thinking and future strategy development. The driving forces behind his work had to cover a wide range of issues from the state of world economies; human population increase; energy resources and demands on them; climate change; transport systems; resource depletion; behaviour of financial markets; animal and plant diseases; policies carbon cap trading; costs and pricing of agriculture (down to the minutiae of labour and fertilizers); and per capita food production material.

He made five main observations. Overall world production of food was rising; at the same time it was getting more expensive; food production was increasing, but population rise outstripped the increase; world grain stocks had fallen to about half the level of the 1980s, but grain mountains were at their lowest since the 1970s. He

concluded that to continue to meet per capita needs of the world's increasing population a new food system had to be found.

He outlined four different food scenarios for the next twenty years: "Were rising food costs just a blip?"; "What if food prices were to remain high?"; "What if today's food system was at its limits?"; "What if a major food crisis arose?". He explored where social and cultural priorities were shifting, and how readily consumers would accept a transition to a new and more sustainable philosophy if the new changes personally affected them. He concluded that people were ready and, on the whole, willing for change and understood the issues fairly well. Closer to home he wondered whether the major factors in future planning might not become the maintenance of mere existence rather than improving efficiency. The world could easily become a precarious place. Much would depend on such wider issues as global costs of energy, rising demands and ever increasing consumption, depletion of materials, gathering of waste products, and increasing global green house gas emissions. He illustrated a cyclic global economy in contrast to our present linear economy, citing the EU vehicle take-back legislation as one example of this process. In a global cyclical economy, environmental costs would be internalized. "Technology itself can be reframed as regenerative, supplementing the regenerative capacity of nature." He thought we could be at a cultural tipping point in taking the first steps to global sustainability, and that the emerging narrative was hopeful.

The conference then turned to three local initiatives.

## Martin Large

### Community Supported Agriculture

Martin Large of Stroud Common Wealth Ltd. said his organization existed to build community wealth for social, cultural and economic renewal in Stroud town and its local area. There was a great and growing enthusiasm. Many separate thriving enterprises were now going concerns: Stroud Communiversity invited 'thought leaders' to talk and inspire their various projects: Gloucestershire Land for People was a pioneering community land trust, which specialized in acquiring land for community farming. Fordhall Farm was one such acquisition. Getting hold of more land was paramount. Gloucestershire County Council had many pockets of land doing nothing, but they were not keen on leasing it. There were many blockages to overcome to facilitate land access. But release of plots of land here and there, and learning how to lease and rent land from landowners was crucial to the overall plan and would underpin the main social needs of a new food culture. Stroud had around 24,000 inhabitants, and Stroud communal allotments and Stroud Community Farm hoped at some point to deliver food at lower than local retail cost. Stroud 'food-co', not Tesco, aimed to be at the hub of local food supply. There were five supermarkets in the area and talks were on going with each of them. These supermarkets now stocked 80% of apples from local suppliers. There was a thriving weekly award winning farmers' market, and a veg-share scheme with 189 members, and even a bursary veg-share scheme worth £33 a month to qualifying members. There was a

vibrant food Transition Town group together with a social enterprise centre, social enterprise workspace, and re-skilling classes in traditional skills from bottling fruit to hedge laying. They worked with and had links with many other associations. In short it was a complete overhaul of the way we conventionally lived and was already a thriving mutually supportive community.

## Julie Brown

### Growing Communities

Julie Brown's presentation was from the urban streets of Hackney where passive consumers expected unlimited choice. They had little say or control over their food supply. Because of its urban orientation, they had to meet a demanding set of local government criteria. There was no help from the local government to provide sustainable leadership. So in response to demand they had set up 'Growing Communities' which was a social enterprise group set up to grow food for London using a sustainable localized system. They strove to be independent. Local organic farmers were in great need of local retail outlets together with recognition and respect for what they were trying to achieve. Within a defined local area there were already 40 small scale organic farmers and a number of urban organic market gardens. They set up and operated a strict buying policy from their organic producers, buying only produce that was seasonable, fresh and minimally processed. A weekly organic farmers' market, an apprentice scheme, a volunteer programme, a box scheme, a collection scheme, a community pick-up, a community lead food trading system complete with, management committee, staff, customers, members and volunteers, had all been independently set up. A Growing Communities Food Zone Diagram influenced best use of the land available. Growing salad and perishables were close to the centre of distribution, and further afield potatoes and vegetables, which had longer storage capabilities. Livestock was raised where it made most sense and where feasible fed waste to pigs and chickens, made use of patchwork farming systems where appropriate, and applied bartering systems and apprentice systems on starter farms. From an area of about 56 miles radius they averaged a £600,000 turnover and had about 1500 customers who shopped each week. They had now grown into a substantial community that had a strong collective voice which could influence choice of what they ate and how it was produced. They had good yields from their land and impressive turnover figures in sales. They had connected a previously unconnected local population and made a vibrant more resilient sustainable food system enriching everyone's life.

# Nigel Lowthrop

## Hill Holt Wood

Nigel Lowthrop said that Hill Holt Wood was originally a private enterprise to restore an ancient Lincolnshire woodland which had been very poor condition. In 1995 Karen and Nigel Lowthrop bought Hill Holt Wood. They set out to prove that ancient woodland could, in the 21<sup>st</sup> century, be a practical going concern as well as being of aesthetic value to the landscape. In 1997 Hill Holt Wood Management Committee was formed to buy the woodland. This was a local community shared-wealth (and control) scheme. Local outreach programmes were started and school education projects were launched for children who had been thrown out of the normal school system. An apprentice group aged between 16 and 19 was formed to help clear the woodland, look after needy people's gardens, tend public and woodland footpaths, and organize a rubbish pickup: all proved good community building links. A number of knowledge partnerships with common purpose were formed together with social enterprise groups and interaction with an array of local organizations. Because such excellent local relationships had been formed, the erection of five eco-build staff houses in the middle of the wood came up against surprisingly little opposition from the planning authorities. The local support reinforced the planners' confidence in the scheme. The case put to the planners was that 20 members of staff could not afford to buy in the village, so they proposed a kind of reverse commuting plan, to bring in workers from outside to live on the job in the wood. The planners agreed to the erection of the five staff houses on first application. It helped that the houses were of architectural interest and that they were eco houses built of different innovative materials. The buildings were community owned and the collective capital value was shared amongst the group. This enabled their staff to have a good standard of accommodation and have pride their jobs despite the low wage. There was also a built in scheme of 'a house for life' if they stayed long enough in their jobs. They could grow their own food on the land, hunt deer and game, and gather fruits and nuts from their surroundings, providing an exemplary integrated, low carbon, and good quality way of living. It was now accepted that the woodland was no longer just about timber or aesthetic value but a true living environment for communities with necessary accompanying amenities.

In discussion the following points were made:

- if legislation would allow this kind of scheme nationally it would attract the right kind of people back to the land. Enabling affordable home building on the land they farmed would be a great regenerative scheme.
- with the falling revenue from farming, people had turned from farming the land to other ways of making a living: such as bed and breakfasts and corporate recreational uses. All this changed the traditional landscape.

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- climate change and its variations was a general threat to current agriculture worldwide. Painful economic choices on vulnerable landscapes brought crop changes which were not always best for the land.
- education about farming was of the highest importance. Children should visit farms as part of their early curriculum. A practical experience of food production was vital for everyone.

## In Conclusion:

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Colin Tudge said that another conference would be necessary to discuss how all the issues of the day could be carried further forward. What had clearly come out of the day was that people felt something was fundamentally wrong in the present food system and the system itself obstructed change and policy reflected nervousness. At the beginning of the day he had hoped that we could formulate a way forward to promoting a more sustainable food system. At the end of the day his thoughts had been reinforced that to promote a better and healthier food system much wider provision for teaching and learning about long term sustainable agriculture was an essential next step. Colleges were already doing this but still with too much emphasis on conventional farming. New courses needed to be devised. As had been reiterated throughout the day, the world wide credit crunch provided an opportune moment to come up with appropriate ideas for policy change.

## Looking through the day's discussion certain recommendations emerged:

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- A working group to be formed, from the participants of this seminar, to take forward government involvement in the change from the present food system.
- Pressure for research grants to promote Transition Agriculture and Transition Technology into main stream further educational establishments
- Case studies of Transitional Technology be written up for presentation in government circles.
- This report to be distributed to feed into the government process of identifying regulatory measures for a better long term sustainable stable food system
- The Government should do more to promote a renaissance of food culture world wide

## Participants

(Speakers denoted with an \*)

|                            |   |
|----------------------------|---|
| <i>Sir Crispin Tickell</i> | Director, Policy Foresight Programme James Martin Institute             |
| <i>Colin Tudge*</i>        | Biologist and Author about Food and Agriculture                         |
| <i>Prof Tim Lang*</i>      | Centre for Food Policy, City University                                 |
| <i>Simon Fairley*</i>      | The Land Magazine   |
| <i>Patrick Holden*</i>     | Director, Soil Association  |
| <i>Hardin Tibbs*</i>       | Saïd Business School, University of Oxford                              |
| <i>Martin Large*</i>       | Chair, Stroud Commonwealth, Facilitator, Social Ecologist and Publisher |
| <i>Julie Brown*</i>        | Growing Communities, Hackney  |
| <i>Tom Curtis</i>          | Director LandShare  |
| <i>Ruth West</i>           | Director LandShare  |
| <i>Alasdair Crosby</i>     | Freelance Journalist, Jersey based                                      |
| <i>Susan Lee</i>           | Policy Foresight Programme, James Martin Institute, Oxford University   |
| <i>Mike Townsend</i>       | Chief Executive, Woodland Trust   |
| <i>Martin Stanley</i>      | Founding Director, LandShare  |
| <i>Dir Colin Bundy</i>     | Principal of Green Templeton College, Oxford                            |
| <i>Christopher Beauman</i> | European Bank for Reconstruction & Development                          |

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|------------------------------|--|
| <i>Nigel Lowthrop*</i>       | Director Hill Holt Wood                                |
| <i>Prof Martin Wolfe</i>     | Director, The Organic Research Centre                  |
| <i>Julie Richardson*</i>     | The Land Scope Project, Dartington                     |
| <i>Dr Daniel Kindred</i>     | ADAS Research Scientist                                |
| <i>Patrick Krause</i>        | Chief Executive, Scottish Crofting Foundation          |
| <i>Roland Bonney</i>         | Director FAI Farms                                     |
| <i>Sheila Dillon</i>         | BBC Radio 4 The Food Programme                         |
| <i>Shaun Spiers</i>          | Chief Executive, CPRE                                  |
| <i>Prof Neil Ravenscroft</i> | University of Brighton                                 |
| <i>Dr Larch Maxey</i>        | Swansea University                                     |
| <i>Dr Robin Buxton</i>       | Northmoor Trust  |
| <i>Andrew Simms</i>          | New Economics Foundation                               |
| <i>Frances Turner</i>        | Homeopath  |
| <i>Dr Ian Goldin</i>         | Director, James Martin 21 <sup>st</sup> Century School |
| <i>Samuel Evans</i>          | James Martin Institute, University of Oxford           |



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## Policy Foresight Programme

Director: **Sir Crispin Tickell**

The Policy Foresight Programme, part of the James Martin Institute for Science and Civilization at the University of Oxford, 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 a year, where around 25 people 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 covers all major areas of the James Martin School for the 21st Century.

[www.martininstitute.ox.ac.uk/jmi/networks/Policy+Foresight+Programme.htm](http://www.martininstitute.ox.ac.uk/jmi/networks/Policy+Foresight+Programme.htm)



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## **James Martin Institute for Science and Civilization**

Director: **Professor Steve Rayner**

The James Martin Institute for Science and Civilization is part of the James Martin 21<sup>st</sup> Century School. The Institute focuses on identifying what have been called the “wicked problems“ (those that are persistent and intractable) of the 21st Century; the “uncomfortable knowledge” which challenges existing institutional arrangements that are ill-prepared to deal with such problems; and the pluralistic institutional arrangements that encourage emergent innovative responses known as “clumsy solutions”.

The Institute focuses these lines of inquiry in relation to four quadrants:

- Science, Technology, and Risk
- Futures
- Complex Social and Technological Systems
- Institutional and Behavioural Change

Each topic is approached in partnership with other institutes and centres at Oxford, and with an international network of collaborating organisations from academia, government, business and civic society.

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THE JAMES MARTIN  
21ST CENTURY SCHOOL  
UNIVERSITY OF OXFORD

## James Martin School for the 21<sup>st</sup> Century

Director: **Dr Ian Goldin**

It is likely that the 21st century will be an unusually challenging one in the history of mankind. The goal of the School is to develop strategies for responding to the most serious problems, some of which even have the potential to threaten the future of humanity itself. At the same time, we also seek to harness the most promising opportunities facing the world in the new century.

The James Martin 21st Century School, founded in June 2005 at the University of Oxford, is a unique collaborative research effort. The focus of the School is on stimulating Oxford's research, by giving the University's scholars the resources and space to think imaginatively about the problems and the opportunities that the future will bring.

The work must meet the best Oxford scholarly standards, must be original and additional to work done elsewhere, and is expected to have a global impact. The 21st Century School has been designed to:

- Initiate new and collaborative research and encourage members of the University to take up new areas and new styles of thinking
- Operate a research grant programme to stimulate innovative research at the Institutes
- Facilitate lectures, seminars and other teaching activities to encourage students and faculty to focus on future challenges. Workshops and other outreach will ensure ideas generated by the School inform public and private decision-making and that the School's work is informed by the global challenges facing governments and society.

The central hub of the School consists of the Director, Dr Ian Goldin, along with a small secretariat and a number of James Martin Fellows. It provides overall leadership and facilitates cross-cutting and interdisciplinary perspectives and supports the work of research Institutes. The Research Institutes, each undertake leading-edge research in their own subject area, and are typically funded for a number of years. There are currently ten Institutes, each of which is located in a department of the University: The James Martin Institute for Science and Civilization; The Environmental Change Institute; The Institute for Ageing; The Institute for Emergent Infections in Humans; The Institute for the Future of the Mind; The International Migration Institute; The e-Horizons Institute; The Oxford Future of Humanity Institute; The Programme on the Ethics of the New Biosciences; and The World Education Institute.

The School also has an affiliation with the Center for Nonproliferation Studies at the Monterey Institute of International Studies. The Center contributes its perspective on the dangers of weapons of mass destruction to the work of the School in exploring the potential consequences of emerging technologies that could shape the future of mankind.

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