

UK Parliamentary Inquiry into the Global Food Crisis

The All Party Parliamentary Group on Agriculture and Food for Development The Associate Parliamentary Food and Health Forum The Parliament and Scientific Committee

Minutes of the Food Security inquiry meeting on Wednesday 11 March 2009

Inquiry team members present: Dr Ian Gibson MP (Chair), Lord Cameron, Lord Eccles, Baroness Miller of Chilthorne Domer, Doug Naysmith MP and Lord Rea.

Introduction

lan Gibson welcomed members and witnesses to the meeting. He described how the inquiry team would work and encouraged the witnesses to give the inquiry team frank advice.

Josette Sheeran, Executive Director UN World Food Programme

Josette Sheeran (JS) thanked Ian Gibson and the inquiry team for their leadership in addressing the critical issue of food security which she said was non-negotiable: we must provide more food and we must ensure that people have access to it. The inquiry team's spot-light on this issue was very helpful, as was the report last year by the International Development Committee (IDC), The World Food Programme (WFP) and Global Food Security.

We are not "out of the woods" in terms of the food crisis. Although food prices have fallen since the highs of 2008, they are still out of reach for most in the developing world. For instance, maize is 100% more expensive than last year in Malawi, while the price of wheat in Afghanistan is 60% higher.

Food security is one of the most urgent peace and stability issues of our time and we are facing an urgent humanitarian crisis. No nation can meet this challenge alone - we have to tackle it in a collaborative and cohesive way. We need to produce double the amount of food by 2030 and this will require innovative approaches. Ultimately this is a question of food assistance towards self-reliance, not charity. This work must be led by nations and involve the private sector. We must ensure that food security is a key issue at the top of the global agenda and we urge the UK to ensure that addressing urgent hunger – along with poverty – is at the top of the G20 Summit agenda. It is critical that we increase food production through research and sustainable innovative agricultural practices. WFP also urges this Inquiry to explore the issue of access - historically, hunger has not been caused by a lack of food, but by a lack of access to nutritious food.

African farmers can make a valuable contribution to tackling food poverty. Already 80% of the food the WFP buys for its programmes comes from the developing world and great progress is being achieved in Africa. The key to success is improvements in infrastructure and communications; farmers need better access to markets.

We can tackle the challenge of food insecurity. In recent decades we have cut the proportion of world hunger by half. China was WFP's largest programme less than twenty years ago, and today it receives no food aid, so we know we can break the barrier.

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The UK has been a strong supporter of the WFP. It more than doubled its contributions last year, helping WFP launch innovative programmes that effectively target hunger in a more sustainable way.

It is the economic crisis, not terrorism or nuclear proliferation that tops the list of short-term US security concerns. In this regard, leadership is one of the key issues. Food security and food access must be discussed at the very highest levels and must be a funding priority. We also need to keep a "bridge over troubled waters". As WFP did last year when it successfully helped nations stabilise and save lives, it must not let down its guard on emergency action but continue to be the last line of defence for the most vulnerable. We need to focus on those most in need.

In this regard, WFP has developed an "economic shock and hunger index" to identify the most vulnerable nations in the interplay between the food and financial crises, and the effect on national vulnerability.

We also need to secure the biggest punch for the food \pounds possible – by looking not just at the quantity of food aid, but its quality. The provision of food fortified with vitamins and minerals can make a tremendous difference – both in terms of saving lives and in the GDP of developing countries. It is estimated that 6% of GDP can be lost in developing countries as a result of the effects of malnutrition among children.

For example, in Myanmar, WFP distributed small packets of a highly fortified chickpea and dried milk paste. These food packs were made in India, cost less than 10 cents per packet and required no water or refrigeration. Such interventions are examples of how we can focus on nutrition and deliver the appropriate food solution.

We also need to ramp up safety nets, such as school feeding or the productive safety net in Ethiopia that DFID supports which has kept 7.5 million people off emergency food aid.

Building better market systems will be crucial to tackling food insecurity. Paul Collier has described the WFP as the "world's insurance system", but our funding is unpredictable and insecure. As a result, the WFP is a spot buyer and panic shipper. It could be much more effective if it had multi-year funding and it is looking to develop an advance purchase facility. For example, Canada gives the WFP some predictable multi-year funding and this has been invaluable. With it, the WFP has been able to offer longer term contracts to buy salt from suppliers in Senegal. As a result of the security arising from these contracts, the suppliers have been able to invest and are now iodising their salt, to the benefit of the local people.

Chatham House and others have called for actual or virtual emergency food stocks to calm market nerves and help prevent hoarding. JS spoke at Chatham House on 10 March and called for an anti-famine system fit for the 21st century: one that will ensure adequate access to food for all. If we are to achieve this, we need to help nations embed solutions, and build an integrated global system that is not crisis-oriented and reactive.

Questions

WFP support for agricultural production capability

Lord Cameron asked what successful programmes the WFP has operated that have enabled countries to improve their long-term food production capability. **JS** said that in China the WFP had planted trees that have helped to stabilise soil, leading to increased capacity for food production. In south Sudan, WFP had re-built roads to facilitate food transportation, but this in turn has had a development impact, providing the infrastructure to improve access to markets. Similarly, the WFP was also engaged in clearing landmines in south Sudan. Five years ago, the WFP was feeding 100% of the population in south Sudan, now it is only 20%.

The WFP provides food for school children as a safety net. In some countries, this could be seen as contributing to human rights because families send their daughters to school in order to secure take-home food rations. The WFP encourages national governments to take over school feeding programmes themselves, but as yet 80% of the world's population does not have any form of safety net.

Knowledge transfer

Lord Cameron asked if the WFP was involved in knowledge transfer to farmers in developing countries. **JS** said the FAO focuses on farmers, while the WFP's main focus is on world hunger. However, in addition to providing food to farmers and their families, it does seek to be a "force multiplier" and she cited work in Timbuktu, planting trees to support local ecosystems, which had led to a big improvement in rice production. The WFP is also working with the Bill and Melinda Gates Foundation – through the "purchasing for progress" initiative, where it uses its huge purchasing power to support farmers in developing countries. Giving the farmers guaranteed contracts, will also enable them to invest in seeds, fertilisers and equipment.

International action to improve physical access to food

Lord Eccles asked JS to comment on international activity, for example on the part of the World Bank, to improve physical access to food through improved distribution and storage systems. **JS** said she thought infrastructure was best achieved when it was the result of "pull" rather than "push": roads should follow development, not lead it. The food crisis has led to greater investment in Africa, but this needs to be allied to smart policies. After the 1974 food crisis, significant investment in Argentina and Brazil led to very positive results, we now face the same opportunity in Africa.

Investment in agriculture to support development

Doug Naysmith referred to the 2008 World Development Report which argued that agriculture was vastly under-used to support development. **JS** agreed with this conclusion and said that evidence showed that funding invested in agriculture has a much greater impact in reducing poverty than investment in any other area. As a result of this evidence, agencies are now looking to increase investment in agriculture. Access to new technologies and research will be vital, but we also need to help farmers connect to markets because if farmers have access to markets, they will increase production.

GM crops

lan Gibson asked how reliant farmers in developing countries can be on the provision of GM crops from the developed world. **JS** said that South Africa had broken the cycle of low yields with GM products. It's not an issue for the WFP, but her personal view was that national leaders should be open-minded about alternative means of increasing food production and access to food and choose whatever solutions are most appropriate for their people.

Professor John Beddington, UK Government Chief Scientist

John Beddington (JB) said there were three key issues: food price volatility, demand for food and the availability of fresh water. Although most cereal prices have fallen since the highs of 2008, food reserves (calculated as a percentage of reserves to consumption) are at historically low levels (some 14% currently, compared with 40-50% in the 1970s). This is likely to lead to increased food price volatility driven by events, for example. as a result of climate change. At the same time, demand for food is rising, as a result of the growing global population, growing urbanisation and increasing prosperity. For example, increasing per capita income in Asia and China has led to increased demand for some food products and this is likely to become a substantial factor over the next 20 years. The availability of fresh water may well become the pre-eminent issue. Clearly developments in agriculture technologies are likely to make water utility more efficient, but this will be more than off-set by a substantial increase in demand for available water supplies by 2030. These three factors need to be addressed in the context of climate change – which needs to be addressed now, particularly as emerging evidence suggests that the climate is changing more quickly than expected.

Urgent investment is now required because there will inevitably be a lag between investment in research and its application.

Impact of climate change

Ian Gibson asked if JB expected developing countries to be worst hit by climate change and **JB** agreed this was likely.

Knowledge transfer

Lord Cameron asked to what extent JB focuses on knowledge transfer and the practical application of research to the field. **JB** said there had been a significant slowing down in investment in agricultural research in recent decades and this needs to be reversed. DfID is significantly increasing investment in agricultural research; and GM crops and the overall use of plant genomics offers real potential in terms of pest control and developing plants that can cope with climate change.

Investment in plant genome research

lan Gibson asked why the UK does not have a plant genome institution. **JB** said it was a good question and noted that the UK has a number of world-class agricultural research institutes; and the Royal Society is looking at the contribution of biotechnology to food security issues.

International scientific collaboration

Lord Cameron asked if JB and UK scientists collaborate with EU scientists. **JB** said they did, but not enough. There is some cooperation between institutions and international academic workshops take place regularly, but greater international cooperation would be necessary in the future.

GM crops

JB expressed real concern about EU regulation of GM crops. He acknowledged that there were proper concerns about GM crops, but said that accumulating scientific evidence showed no health "dis-benefits", so we need to ask why the EU is resisting what the rest of the world uses. JB suggested that the EU's policy on GM crops is not based on scientific evidence, but reflects a political choice. Scientists do not have a monopoly on political choices, but where policies based on incorrect science are adopted they should be challenged. Lord Eccles suggested the issue of GM crops is not so relevant to farmers in Africa, where farmers keep their own seeds and have limited access to conventional modern seeds. JB said that some 30% of food production in Africa is lost before harvest and more is lost afterwards as a result of pests and disease. This is an issue that needs to be addressed and some GM research is directed at producing solutions to these problems.

Impact of biofuel production on food security

Lord Eccles asked JB for his assessment of the impact of biofuel production on the displacement of food crops. **JB** said we face increasing demand for energy and food and these need to be balanced. Some biofuels do not make a positive contribution to climate change, generating more greenhouse gas emissions than they save, but others – such as sugar cane in Brazil – do provide a genuine net benefit. Biofuels are replacing food crops in some parts of the world, but there are uncertainties about the overall impact. The Gallagher Review recommended a slowing down of expansion of biofuels use on a precautionary basis and Defra and the DfT are investigating this issue further. He suggested second generation biofuels offer real hope for the future, but investment in research is needed now. **JS** said that biofuels links energy and food prices and biofuels are having a direct impact on price volatility,

¹ **Including** the John Innes Genome Laboratory (funded through BBSRC) which provides a state of the art genomics service across a wide range of applications on a variety of different platforms (not just plant sciences). This is a non profit organisation and has a strong client base in both academia and commercial companies, ranging from small start ups to large conglomerates, both within the UK and throughout the rest of the world.

so it is critical that this issue is examined. Traders in the Chicago corn pit had told her that energy buyers were outbidding food buyers; as they did in palm oil markets in Africa.

Role of the Chief Scientist

Doug Naysmith (DN) asked JB about the role of the UK Chief Scientist in respect of food security issues. **JB** said he leads the network of Government Scientific Advisers; he chairs the Cabinet Office Taskforce on Food Research; and he is the Director of the Foresight Programme in Government, which is working on food security and will report in 2010. DN asked if JB could force issues up the political agenda or whether he had to respond to political direction. **JB** said he could influence the priority with which issues are addressed and he thought he had been successful over the last two years in ensuring attention was paid to the issues of biofuels and food security. **DN** referred to comments JB had made suggesting that the food crisis would bite more quickly than climate change and asked whether he had given DfID advice that reflected this view.

Impact of climate change on production and training needs

Josette Sheeran (JS) said she agreed with JB. We are seeing the effect of climate change now and we need to improve training in response. In Africa farmers are still following traditional patterns of production but this means, for example, that they are planting seeds too deep (at the same depth their fathers had planted) to germinate. We need to educate farmers to enable them to respond to climate change.

Food production losses, risk mitigation

JS said food losses at the farm gate are tragic and critical: some countries lose 50% of their food production. The WFP is helping by buying food at the farm gate, as well as delivering food. Mitigating the risks farmers play is crucial to increasing food production. Increasing food prices should drive increased supply, but in the Rift Valley farmers are planting less because the price of fertilisers had gone up 400%. Those farmers said even if they had access to micro-credit they would not have increased production because they did not know what price they would receive at harvest. Thus policies to mitigate the risks farmers face, including protecting them against price volatility are vital.

Second Panel of Witnesses

lan Gibson invited the second panel of witnesses to introduce themselves. All these witnesses had provided advance statements so the inquiry team moved directly to question them. The witnesses were:

Dr Andree Carter, Director, UK Collaborative on Development Science (UKCDS); Peter Hazell, ex IFPRI, an agri-economist and Trustee of FARM-Africa; Professor Malcolm Potts of University of California, Berkeley; Dr Akin Adesina, Vice-President, Alliance for a Green Revolution in Africa; and Dr Steve Wiggins, Research Fellow and agricultural economist, Overseas Development Institute.

Questions

Population growth

Malcolm Potts (MP) said that population growth was extraordinarily relevant to food security and the challenge of food security will not be met unless we slow population growth. However empirical evidence suggests family sizes can be reduced if information and resources are provided to support family planning. **DN** agreed that population growth is very important and he asked MP to comment on why this issue had been less prominent in discussions over the last 10 – 15 years. **MP** suggested the world would pay a heavy price for allowing population growth to slip down the agenda. He suggested it had declined in relative importance after the Cairo International Conference on Population and Development partly because the impact of HIV/AIDS had diverted resources that had been directed at family planning. He noted that the All Party Group on Population, Development and Reproductive Health had concluded that it

would be "difficult or impossible" to achieve the Millennium Development Goals without addressing the issue of population growth.

Population density

Akin Adesina (AA) said that population densities are high in parts of Africa, such as Malawi and this has implications for self-reliance. The combination of rapid migration to the cities and low agricultural productivity means that the food needs of the increasingly urban population are not being met. The work of the Alliance for a Green Revolution in Africa (AGRA) is focussed on addressing this issue by helping smallholder farmers to become more productive.

Scientific collaboration

lan Gibson (IG) asked what difficulties prevent scientific collaboration and Lord Cameron asked whether we need more international collaboration. Andree Carter (AC) said greater collaboration was vital. We face multi-disciplinary and complex problems and we need a multi-agency approach to address them successfully. The UKCDS has looked at barriers to collaboration. They found that scientists were happy to work together, but funding is the problem. HEFCE's evaluation framework does not value applied science in the same way as basic or "pure" science. We need to add more value to UK science and this will require more resource and more commitment. At present, collaboration is a secondary issue for most institutions because of the transaction costs involved. We need a new framework for research procurement, as well as better bidding and tendering processes. We do need more international collaboration, particularly with developing countries. UK science is quite internally focussed and we need a more global approach if we are to stay at the forefront of science.

Top priorities for tacking the challenge of food security

The witnesses were asked to name their top priorities for tackling the challenge of food security. Simon Wiggins (SW) said he would like to introduce a note of optimism to the debate on agriculture and food production. He said that if the record of 137 countries across the world with more than 1 million inhabitants in agricultural growth from the early 1990s to the mid-2000s is examined, then 17 of the top 30 fastest-growing agricultural sectors are in Africa. Low productivity in Africa can be improved. The farming sectors there are doing well, but their high population growth means that their production per capita is not so good. Given the rapid growth of agricultural output in some African countries, there are lessons for other parts of Africa from neighbouring countries. In response to a question from DN about the need for better training to enable farmers to respond to climate change, he said that the evidence suggests African farmers can adapt to slow shocks, such as declining soil fertility, it is sudden shocks that cause problems. Peter Hazell (PH) said a top priority was better government policy towards agriculture in many African countries. A team of Chinese economists with whom he had visited Africa had been very puzzled by the lack of agricultural development in eastern Africa until they realised that government policies were not supportive of small farmers. China had dramatically increased their agricultural production by changing their policies to offer better support to small farmers. China is also an example of how a seemingly excess population problem can be turned around through rapid agricultural and economic growth. In terms of the future food outlook, Europe and the USA will be able to feed themselves and their only real challenge will be some trade off between use of land for food or fuels. India and China will invest in whatever technologies they need to meet their growing food needs. The real challenge is Africa and Africa will need help. Regrettably, levels of donor support for African agricultural development remain much too low.

Population growth

IG suggested that it would take time to slow population growth. **MP** responded that it can be speeded up with good information, education and the provision of contraceptives. However, we need to tackle non-evidence based barriers to family planning. For example, in some countries only doctors and nurses are allowed to supply family planning resources. In Madagascar women are not allowed oral contraceptives if they have not had a baby, while in Tanzania they are forbidden oral contraceptives if they have five children – neither rule has any scientific validity. MP would like DfID to do more to empower local communities. He

acknowledged that the UK was a leader in dealing with unsafe abortions, but better provision of contraception would reduce these. Lord Rea described a recent visit to Uganda, where he had witnessed good community based work to tackle malaria, but where NGOs are not allowed to promote family planning. Uganda, a country the size of the UK is aiming for a similar size population and has one of the highest fertility rates in the world. He asked whether MP thought using community based workers to promote family planning would be the best way forward. MP agreed it would be appropriate and useful if they could provide contraceptives, information and advice. He added that the President of Uganda had accepted that family planning is a human rights issue, so he thought it would be possible to make progress in Uganda even though the Government would not help.

Small farmers in Africa

Lord Rea asked whether central and eastern Africa would be able to increase production significantly, given the predominance of family farms averaging an acre each. AA said the Nobel Prize winning economist TW Schultz had investigated small farms and found them efficient both technically and in terms of management. The difference between Asia and Africa is that small farmers in Asia had been supported by government policy, including investment in research, information, price stabilisation, irrigation, etc. In Africa, agriculture had been destabilised as a result of World Bank structural adjustment programmes. Agriculture needs to be put back at the top of the agenda if farm productivity in Africa is to be addressed and this would involve putting institutions and policies in place to support smallholder farmers. If agricultural yields were doubled by 2015, that would be enough to lift 70 million people out of poverty in Africa. Many farmers in Africa complain that there is no market; increasing food prices have not resulted in increased supply because the farmers have no access to credit to invest in seeds, etc. ODAs are likely to decline because of the financial crisis, but there is significant liquidity in commercial banks in Africa. However, less than 1% of private finance goes into agriculture at present. We need to unlock commercial financing of agriculture in Africa and this could be achieved if international loan guarantees were used to improve lending to farmers by African banks. Lord Rea asked about the scope of AGRA's work. AA said they had started in Malawi where famers had difficulty accessing finance and input markets were poorly organised. AGRA trained general retailers to sell fertilisers and other inputs, thereby improving the supply of these products to the rural poor. These general retailers are now also providing credit to smallholder farmers. The success of the Malawi subsidy programme, providing vouchers for agri-dealers, has led to similar programmes being adopted in Kenya, Tanzania, Mozambique and Uganda.

Involvement of small farmers in export crop production

Lord Eccles asked AA to comment on the involvement of small farmers in export crop production. **AA** said it was significant in countries like Kenya. However, whereas some 80% of horticultural production was met by small farmers in the past, this had dropped to some 20% now as small farmers have been increasingly displaced by large commercial farms who are able to meet the standards required (eg hygiene). Small farmers will need to be trained to improved quality standards if this is to be reversed. Many of the smallholder farmers are women and they also face difficulties in accessing finance and new technologies.

Investment in agricultural research

Andree Carter said her "wish-list" would include the UK Government producing an international policy on research for the universities and Research Councils, particularly one that would indicate that work with developing countries is valued. She would also like rewards to recognise that saving a life is as good as "producing a paper". Finally she would like to see smarter ways of working: focussing on how research projects are put together and linking them to direct benefit. We need to invest in agricultural research and ensure that we work collaboratively. Ideally we would have another 500 to 1,000 agricultural scientists - across all disciplines, for example soil scientists, entomologists, mycologists etc. We also need better mapping because we do not know where we are investing in research overseas. HEFCE are now considering development studies in their Research Evaluation Framework (REF) pilot on bibliometrics and have invited a international development expert to attend their advisory

panel, following extensive lobbying by UKCDS. **Lord Cameron** asked if UK scientists were having a positive impact overseas. **AC** said they are, but this could slip because of the age demographics of UK agricultural scientists. **AA** said that in the past the UK had spent a lot on training Africans in UK universities, but the poor quality of research institutions in Africa mean that Africa did not secure full value from them. UK scientists have also played a valuable role in curriculum reform in agriculture and they are at the forefront of distance learning. AGRA is supporting local capacity building by investing in agricultural research in African universities at KwaZuluNatal and the University of Ghana. Overall AGRA is working with 16 universities in 12 countries supporting the development of future leaders in Africa. However, revamping African government policies to ensure they support agriculture will be crucial. We need evidence based policy and greater gender inclusiveness.

Countries investing in Africa

lan Gibson asked which other countries are investing in Africa. **AA** said that China is investing heavily, while Brazil and India are increasingly involved.

Conclusions

Malcolm Potts (MP) said family planning needs investment just like agricultural research. We need to support women with family planning, not least because they make up such a high proportion of the smallholder farmers in Africa. Successful family planning requires building education capacity and improvements in the availability of information and contraceptives. If we combine family planning with increasing agricultural production the future will look less sombre. Peter Hazell said the private sector can play a valuable role and institutions like AGRA are leading the way, but Africa stills needs huge improvements in infrastructure if it is to benefit from the other initiatives discussed. Akin Adesina said the most important requirement is political will for change. Africa is at a tipping point. African governments have recognised that they have under-invested in agriculture for too long and they have agreed to increase investment in agriculture to 10% of public spending. Some countries - Ethiopia, Mali, Malawi and Rwanda have already met this target. Work is also being done on a global fund to create incentives to encourage African investment in agriculture. Other reasons for hope include the emergence of a more vibrant private sector in Africa and the fact that farmers' organisations in Africa are getting smarter about applying pressure on their governments. These three key factors make for a more positive environment in which to work for change.

lan Gibson thanked the witnesses for giving up the time to contribute to the inquiry. He emphasised that the inquiry was benefiting from the evidence being given by very high quality contributors and the inquiry team are grateful for this advice. He announced that further inquiry meetings would be held on 25 March and 1 April with a fifth and final session with representatives of the media to be confirmed.

CLC, March 2009