

THE PEOPLE'S REPORT ON GM



PEALS

www.gmjury.org

SUMMARY

1. WHAT IS THE PURPOSE OF THIS REPORT?

This report highlights the conclusions of two separate juries that met in Hertfordshire and Tyneside in the summer of 2003 and deliberated on the issue of GM crops. The Jury processes were organised by a team from the Policy, Ethics and Life Sciences Research Institute (PEALS), University of Newcastle, and designed to ensure random selection of jurors, the provision of a diversity of specialist perspectives and the transparency of all proceedings. This report also contextualises these deliberations within the range of citizen participation initiatives on GM that have taken place in the UK and abroad over the past few years.

2. WHO IS THE REPORT FOR?

Decision-makers are the main target audience for this report - be they in Government, industry, consumer/ environment groups or trade unions - particularly those involved in decisions about the future of GM crops and GM foods. We also hope it will attract the attention of those working to create spaces for ordinary people to have a bigger voice in policy-making, especially groups that are trying to democratise the GM debate.

3. MAIN CONCLUSIONS

Each GM Jury reached its verdict independently of the other. Their full conclusions can be studied in full in Section 3 of this report. The two verdicts broadly agree, in that both Juries call for:

- A halt to the sale of GM foods currently available, and to the proposed commercial growing of GM crops. This conclusion is based on the lack of evidence of benefit and the precautionary principle.
- Long-term research into the real risks of damage to the environment and the potential for harm.
- An end to blanket assertions that the GM crops are necessary to feed the starving in the Third World, given the complex social and economic factors that lie behind such hunger.

These verdicts were reached by jurors who were briefed on GM from a diverse group of acknowledged experts in the relevant subjects. The choice of these 'witnesses' was approved by stakeholders with vested interests on either side of the GM debate.

4. RELATED CONCLUSIONS

Juries on GM often reach verdicts that go beyond the technological aspects of the subject. Such jury conclusions have importance for a wide range of decision makers. GM Jury verdicts included:

- A critique of current conventional agricultural practices based on high-inputs of fertilisers and pesticides.
- A proposal for support systems for agricultural techniques that do not rely on artificial chemicals, such as organic farming
- A call for incentives to encourage retailers to act in the interests of smaller and organic UK farmers, rather than to import food from abroad.
- A call for bodies that regulate new agricultural and food technologies to be made fully accountable to citizens, together with specific proposals for reform.
- Concerns that Government communication and media coverage does not give sufficient weight to the importance and complexity of the GM issue, together with suggestions of organisations whose remits could be expanded to address this.
- Proposals to curb the power of large agro-chemical corporations to impose new technologies on farmers and consumers, with little regard to what those farmers or consumers – whether in the industrialised or Third Worlds - actually need.
- The need to transfer risks that may arise from GM technologies away from farmers - who currently have to sign contracts that make them liable for problems – and towards the corporations that have developed the technology.
- A concern that the gradual privatisation of scientific research is threatening the independent regulatory assessment of GM technologies, together with a call for future research to be more accountable to the population.

5. WIDER ISSUES

While the four areas listed above have been raised in previous exercises, other issues raised by these two GM Juries were new. They included:

- A condemnation of the way in which the elected Government has merely paid ‘lip service’ to public debate on such a major issue as GM, together with suggestions of specific mechanisms whereby such debates could be improved.

This is a preliminary report compiled after the GM Juries were concluded on 13 August 2003.

A fully-referenced edition of this report will be available shortly via www.gmjury.org and from PEALS.

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1. AIMS

As 'citizen empowerment' has been incorporated into the language of participation used by national and local institutions, it has become devalued. In the same way that 'sustainability' lost its force as a radical concept critiquing mainstream economics, the vocabulary of citizen participation has lost its edge. Yet, just as is the case with the ecological dimensions of economic policies, the need for science and technology policy to engage in processes whereby non-specialist citizens can have a greater say in both its direction and application is more urgent than ever.

Over the last thirty years there have been numerous attempts at processes that give so-called 'lay people' a voice in debates around the potential introduction of one particular technology – genetic modification (GM) - into our agricultural and food systems. These attempts have ranged from public meetings and the appointment of consumer representatives on regulatory committees, to focus groups and citizens' juries. The announcement of an official period of public debate by the UK Government in the autumn of 2002 gave a new prominence and political legitimacy to these efforts.

A key factor in whether methods of participation become useful movements for democratic change is the extent to which they can be a spring-board for more widespread societal debate and mobilisation. This is a particular challenge in the case of science policy, where the voice of the public has been historically marginalised by Government and corporate elites. UK citizens have been particularly ill-served by past efforts at participation in this area of policy-making. The agreed aims of the four organisations funding the GM Jury - the Consumers'

Association, Greenpeace, the Co-operative Group and Unilever - were to 'Provide deliberative public input into GM public debate by co-sponsoring an agenda-setting citizens' jury on GM food and crops'.

The PEALS team also used objectives that, together with the principles listed in Box 3 (see Background, below), form part of its ongoing programme of grassroots action inquiry, which are to:

- Build our research on a respect for, and trust in, the capacities of all citizens.
- Emphasise democratic values and processes by attempting the co-creation of knowledge applicable by the researched (not just the researchers) in efforts to increase control over their own situation.
- Adjust research processes and results to each other at every point to ensure the continued relevance of the research process to the needs and interests of research partners.

Our report begins with a description of the GM Jury process, followed by the two separate sets of conclusions written by the two juries at the end of their deliberations. Having outlined the different methods and philosophies of citizen participation, we emphasise the recommendations from the two juries' verdicts that require action from decision-makers in different sectors. Finally, we speculate on the wider potential implications of citizen participation processes, both for the GM debate and with regard to improving the quality of democracy in other areas.

2. THE GM JURY PROCESS

Preparing for the jury hearings involved three overlapping stages – the setting up of an Oversight Panel, the recruitment of a jury, and the selection of witnesses.

OVERSIGHT PANEL

The function of the Oversight Panel was to continuously monitor and evaluate the jury process. They have a particular importance in guiding the selection of witnesses, the recruitment of jurors and the facilitation of the hearings. Coming from organisations with a variety of vested interests on the GM issue, and being able to contribute a range of specialist knowledge on citizen participation processes, the Panel is able to make a major contribution towards providing the safeguards that ensure that the process is trusted by individuals and organisations beyond those who commissioned it. They have a particular role in the selection of witnesses and briefing materials for the jurors. The panel members have a range of both expertise of citizen participatory initiatives and of the issues surrounding GM foods and GM crops.

“ the Oversight Panel is able to make a major contribution towards providing the safeguards that ensure that the process is trusted ”

BOX 1 – MEMBERS OF THE OVERSIGHT PANEL

Dr Fiona Barbagello

Science in Society Manager, British Association for the Advancement of Science

Dr Eric Brunner

Reader in the Department of Epidemiology, University College, London

Dr Simon Bright

Head of Technology Interaction, Syngenta

Gary Kass

Policy Adviser, Parliamentary Office of Science and Technology

Dr Tom MacMillan

Director, Food Ethics Council

Dr Michel Pimbert

Principal Associate, International Institute for Environment and Development

Dr Sue Weldon

Citizens' jury practitioner and Senior Associate, Centre for the Study of Environmental Change, University of Lancaster

Prof Brian Wynne

Professor of Science Studies and member of the Royal Society's science in society committee, University of Lancaster

Representatives of the Do-It-Yourself Jury Steering Group

Representatives of the four funding partners

Consumers' Association, Greenpeace, the Co-operative Group and Unilever

Representatives of the facilitation team

At the initial meetings of the Oversight Panel members, the facilitation team and Newcastle's Do-It-Yourself (DIY) Jury Steering Group explained the Jury process to those who had not been part of jury-type processes before, and allowed them to ask questions to those who had. GM specialists and stakeholders were also asked to suggest who would make good witnesses for the GM Jury. There was also a preliminary discussion about the commitment those involved in the oversight of the Jury were able to make to ensure that the results of the Jury were considered by decision-makers, both within their organisations and beyond.

“ Five thousand eight hundred names and addresses were picked at random from the electoral roll ”

JURY RECRUITMENT

The recruitment of a jury that is a more or less random sample of the population and who are not selected according to their interest in the subject under discussion is a vital element of a process that is balanced, fair and is seen to be both of these. Five thousand eight hundred names and addresses were picked at random from the electoral roll in four wards of both Gateshead (Tyne and Wear) and St Albans (Hertfordshire). A letter of invitation describing the Jury process, but not mentioning the subject of the hearings, were sent to these addresses during June 2003. The letter contained a brief questionnaire and the dates of the jury hearings.

Because a jury of 12-15 people can never be statistically representative of a local or national population, no jury will never be more than a symbolic representation of a particular geographic community. However, the DIY Jury Steering Group divided the responses that were received into gender and a range of broad age categories, and then picked the final names 'out of a hat'. Apart from these two factors there was no attempt to produce a particular social mix on the jury. The process therefore broadly mirrored that used in the selection of UK citizens for legal jury service. Further information on the selection process will be provided in the revised edition of this report.

SELECTING WITNESSES

The Oversight Panel suggested a number of names of specialist witnesses to the Jury. They had been briefed that the qualities required in a witness included good communication skills. They should be able to present information in a concise jargon-free style, and have specialist knowledge of the subject being discussed, either as a someone engaged in a profession related to the subject, or someone who studies the subject in a research institution. They should be a good listener who gives clear and frank responses, since much of the time they are with the Jury will be spent answering questions from them. It was the Oversight Panel's task to ensure that the final selection of witnesses (shown in Box 3) could provide a balance of perspectives on an issue.

BOX 2 – LIST OF WITNESSES

Mark Avery

Royal Society for the Protection of Birds. Director of Conservation with responsibility for RSPB's conservation policy, parliamentary work, research programme and acquisition of nature reserves.

Sue Dibb

Senior Policy Officer at the National Consumer Council, (funded mostly by the Department of Trade and Industry, but a non-departmental body), where she has particular responsibility for the areas of food and new technology and consumer participation in decision-making.

Michael Hart

Small farmer, St Austell, Cornwall. Chair of the Small and Family Farm Alliance.

Steve Hughes

Unilever Industrial Research Professor and Co-Director, Egenis, School of Biological Sciences, Exeter University, and Visiting Professor of Biotechnology. West Virginia State College.

Tim Lang

Professor of Food Policy, City University, London. Fellow of the Faculty of Public Health Medicine of the Royal Colleges of Physicians.

Mike May

Senior Liaison Officer, Rothamsted Research (Brooms Barn), the largest land-based institute in the UK, conducting extensive publicly and privately-funded research into GM crops.

Sue Mayer

Director of GeneWatch UK, established in 1998 to monitor the science, policy and ethics of genetic technologies from a public interest, animal welfare and environmental protection perspective.

Walter A. Pengue

Professor of Agriculture and Ecology at the University of Buenos Aires, Argentina, which has conducted long term studies on agricultural and socio-economic impact of GM crops in South America.

Nigel Poole

formerly Global Director of External and Regulatory affairs at Zeneca Plant Science (formerly ICI, now Syngenta). Now Director of Sekona, a consultancy company.

Paul Rylott

Head of the Bioscience Department, Bayer CropScience UK. Acting Chairman of biotech industry umbrella group, the Agricultural Biotechnology Council, and a member of the Agriculture & Environment Biotechnology Commission (AEBC).

THE JURY HEARINGS

The Jury's hearings took place on ten weekday evenings between 18.30 and 21.00. Previous experience has shown this to be the time that includes those who cannot take time off work, without excluding retired and younger people. We chose a location for the Jury that was easily accessible by public transport and had car-parking facilities. We also ensured disabled access was possible. The room we chose was large enough to allow the jurors to sit round in a circle, but also had some tables so that jurors could have something to lean on when writing. Tea and coffee and snacks were provided, which were important, as the sessions took place when many people normally have their evening meal.

The facilitators' attitude of respect toward participants is a crucial component in the formation of a useful verdict. A key part of this respect is allowing participants to define the issues to be discussed in the way they want. The facilitators' approach has to strike a balance between encouraging jurors to provide perspectives useful to policy makers on the one hand, and giving control to the participants by providing opportunities for them frame issues in their own way on the other. The model of the jury developed at PEALS makes the most of the limited time available for deliberation by using a number of participatory tools through which people could articulate their concerns and suggestions.

As well as being on hand as a resource during the formal hearings- the facilitators also assisted the Jury in plenary sessions and small group discussions. These periods of the hearings were important for ensuring that the less vocal members of

the jury also had a chance to engage and contribute in a more convivial setting than the plenary sessions. They also enabled jurors not only to consider what they had heard and seen from witnesses, but to formulate questions for these specialist witnesses, and to debate the answers they received from the witnesses with their fellow jurors.

“ the less vocal members of the jury also had a chance to engage and contribute ”

Jurors were encouraged collectively to explore their feelings, doubts, views and preliminary conclusions at the end of each evening's hearings. The facilitators also designed deliberative tools to make constructive use of different experiences, viewpoints and opinions.

“ witnesses were asked to leave the jury room to allow jurors a safe space ”

Once the witness had provided the necessary immediate clarifications, but before jurors started entering a wider discussion, witnesses were asked to leave the jury room to allow jurors a safe space in which to discuss what they had heard.

Given that witness presentations tended to include quite a lot of jargon that not all jurors, or facilitators, were necessarily going to understand, we used a 'yellow-card' system. This involved asking for a volunteer from the Jury, or all the jurors, to monitor the witnesses presentations closely for any use of acronyms or other jargon that they or other jurors might not understand. By holding up their yellow card in front of the witness they gave them the opportunity to both explain each term as they went along and, hopefully, reduce the overall amount of jargon.

At the end of most witness sessions the facilitators made time for a discussion about what conclusions the Jury were reaching so far and what extra information they would like to have, either in the form of witnesses on particular subjects, or in written form. The facilitators kept a running list of items that the jurors suggested should form part of their recommendations.

Discussing the witnesses presentations is not necessarily the only time that a jury's deliberations benefits from some safe space for jurors to talk among themselves. The facilitators continuously monitored whether the Jury would prefer if non-jurors,, should leave the Jury to continue their discussions alone.

“ the jurors have to focus on a statement that best summarises what they think would lead to positive change ”

For most members of a jury, the writing of their report is the most challenging part of the jury process as it means they have to focus on a statement that best summarises what they think would lead to positive change. An initial exercise was to review the provisional list they had built up during the course of the hearings and ask each other whether they wanted to delete any on the list or add to them.

We then asked the jurors to rank the recommendations on which there needed to be a conclusion reached in order of the importance they attached to the issue. This ranking exercise should made the writing of the report easier, as the jury can then go through the list of areas where a recommendation needed to be made in order of priority, though there was often overlaps between these areas.

“ the final session allowed for a vote, usually by secret ballot, on each recommendation ”

The drawing up of precise recommendations took place in small drafting groups of four or five people each. Once draft recommendations have been reached, the final session allowed for a vote, usually by secret ballot, on each recommendation, so that the unanimity or divisions on the Jury for each particular part of the verdict could be gauged.

3. GM JURY VERDICTS

A principle of the jury was that members of the Oversight Panel should be able to find out exactly what happened during jury sessions without needing to attend themselves. We therefore videoed the proceedings and offered copies of the tapes to members of the panel. This results in a video archive, which can serve as a useful resource for anyone wanting to understand the process. However, it was important to only start filming having informed the Jury, and allowed anyone who did not want to be filmed to remain unseen. A handbook on running jury processes 'Teach Yourself Citizens' Juries', which gives more detail of exactly how a jury process works, is now available from the PEALS Research Institute, University of Newcastle (www.peals.ncl.ac.uk).

The two juries included the following individuals, though others preferred not to have their names published.

Scott Banks	Shah Abu Nasser
Helen Colclough	Norah Owens
Stephanie Dare	James Rooke
Brenda Douglas	Gerrard Shortt
Gavin Hammond	Gerry Smith
Glynn Lewis	Nicola Smith
Zobia Malik	ChatarajanThoree
Gordon Mclver	Samantha Turner
Gloria Wilkie	Brendan Mulholland
Patrick Murray	Graham Hopkinson

These conclusions were drafted by the members of the respective GM Jury during their hearings.

3A - TYNESIDE GM JURY CONCLUSIONS

FARMING

We are very concerned about:

- industrial farming techniques, such as the feeding of animal matter to other animals and the over use of antibiotics.
- the impact of such techniques on livestock welfare.
- the current practice of feeding of GM crops as feed to UK livestock.
- the contamination of organic farms with GM via genetic cross-contamination.

“**Chemicals related to GM technologies are so efficient at doing their job that they kill everything**”

We are also concerned about the potential short and long term effects of GM technologies on our flora and fauna. The native species on this small ecologically delicate island are valuable and we cannot afford to lose any more of them. Trials that have been undertaken so far have been too short-term. Chemicals related to GM technologies are so efficient at doing their job that they kill everything – the weeds and smaller plants, which are food for

small animals, insects and birds, die. We heard evidence about this is in the context of band spraying, which needs to be researched further.

DEFRA and other relevant Government Departments need to take steps to ensure better regulation of farm conditions - including more efficient and rigorous use of inspections. Some of the conventional farming techniques used at the moment are just as damaging as the potential effects of GM.

FOOD SAFETY

There has been little research on health ill-effects due to GM food. There is not enough known about the long term safety of GM crops for the consumer in the future for it to be given the green light. We suggest that the Food Standards Agency carries out more research on food safety, especially the potential effects of antibiotic-resistant markers.

ACCOUNTABILITY

We believe that at present there is very little accountability to the public on the GM issue. Unlike in other industries, the agrochemical companies like Monsanto are not liable for their products' effects. To quote from a document shown to the Jury - 'In no event shall Monsanto or any other seller be liable for any incidental, consequential, special or punitive damage'. Cross contamination of organic farms, impact on the environment and extinction of species of wildlife are all possible negative effects of GM farming in the UK. Yet none of the large companies involved will be legally or financially liable for any problems caused. Laws need to be changed, if necessary, to make these

companies liable. We agree that when groundbreaking scientific discoveries are made, those who developed them should benefit. However, they should feel confident enough in their product to take responsibility for the problems it may cause. There must also be a body to regulate the companies and their responsibilities to farmers and consumers. This body would exist to oversee all GM technology and where it is used. We believe this should be funded by the tax payer to make it wholly independent and accountable to the public. We suggest the body should be made up of people drawn from various professions, not just scientists.

“ We suggest the body should be made up of people drawn from various professions, not just scientists ”

Information on those members' personal and financial interests should be made openly available to the public. The government and the law must back this body and it must have the power to take these companies to court and compensate individuals affected by any problems which may arise. This body could also police other related issues, for example enforcing correct use of crops and seeds and enforcing separation distances. If GM crops were to be grown in Britain, this body could be responsible for looking at crops on a case by case basis.

MEDIA

We believe that agrochemical companies and other agencies involved in this issue have not been clear with the public. They have used scientific terms to blind most normal people. If the public knew everything about GM, we feel they would be able to make more informed judgements on this and feel confident in making them. It has been suggested by another group debating this issue that a person should be appointed to oversee the use of plain English in science, so that the information on GM (and other scientific issues) can be more easily understood by all. This could function as both a publisher of literature and a regulator of good practice in the GM industry.

“ **The Press and Broadcasting Complaints Commissions should be given powers to force media outlets to make corrections** ”

We believe the media handling over this issue has been very sensationalist and often biased. Scaremongering in the popular newspapers has hidden much of the vital information. The public has been bombarded with headlines such as ‘Frankenstein Foods’. We feel especially that the ‘pro’ view has not been represented equally in the media. The pro-lobby should have equal media space and air time to the anti lobby.

The Press Complaints Commission and Broadcasting Complaints Commission should be given powers to force media outlets to make corrections if they have been grossly misleading about a scientific issue.

One of our witnesses, Paul Rylott, was invited to appear on Newsnight on BBC 2 on 20 July 2003. He was placed in front of a camera he had not been shown how to use in an empty TV studio in Newcastle. The presenter in London usually had his back to Rylott. The presenter concentrated on the two other guests – the government Chief Scientist and former Environment Minister, and largely ignored Paul Rylott, apart from one or two comments. We feel that our GM Jury gave Paul Rylott a better hearing than the BBC. It raises the issue of whether the media gives a fair hearing to scientists supporting GM.

“ **The Government's GM Nation public debate has been invisible** ”

GOVERNMENT HANDLING OF THE GM DEBATE

The Government's GM Nation public debate has been invisible. None of us had heard details of this Government process, or how we could take part, before we arrived at the Jury even though it had been launched several weeks earlier. This is despite the fact that several of us have followed the wider controversies and debates about GM crops for several years through various media outlets. Members of the Government have suggested that they value the public's opinion on GM crops, but we doubt this is genuine as they have already hinted at their desired outcome.

“ a cross section of society should be convened to guide decisions in this area ”

The Government is aware of how it could publicise an issue (e.g. Child Tax Credit) and collate information from the public (e.g. a census) yet it has used none of this knowledge in the GM debate. Most of the information it provided was via its website which is not available to all the public. The 'GM Nation' website contains little actual information on the topic. There has been no assurance from the Government that it will take into account the results of this debate or how it would do so. Future debates of this kind should be highly publicised. In future, the information collected should be used before decisions are made, not after.

When some of us visited it, we found that the Government's official website gave no clear information - only a statement that there was disagreement.

People reading this report should ask themselves:

- Will those in power listen to our opinions?
- Will they ask us before they make a decision?

In relation to this we suggest that as future potential 'second generation' GM crops are developed, a cross section of society -

twelve people from each region of the UK - should be convened to guide decisions in this area. All relevant Government departments, including the Prime Minister, should be involved in making this real debate happen.

LABELLING

The UK Government, EU and international bodies should ensure that there is a universal symbol for international recognition which would show if a product contained GM or animals that have eaten GM.

All meat products should be clearly labelled according to whether it is

- 1) organic and free-range.
- 2) industrially farmed but not fed on GM.
- or
- 3) fed on GM.

Any GM content should be labelled, not just when it makes up a big proportion of a product. Labelling should also reflect the quality of animal husbandry.

“ Research is carried out and increasingly owned by corporate interests ”

PRIVATISATION OF RESEARCH

The Government should be funding independent scientific research itself. We now live in a world where even traditional areas of research are affected by industry. Research is carried out and increasingly owned by corporate interests, via patents

for example. The Government has a responsibility to the public to research health effects and contamination in relation to GM. If the Government had its own research and its own scientists then these advances in technology could be used for the good of the public and be accountable to them. If second generation GM crops were to be developed privately would they be too expensive to be offered via the NHS? The public interest must not lose out to corporate interests in this area. We have a right to ask for fair scientific research in all our interests.

LIABILITY

At present all the liability falls on the farmer. Some of this liability should fall on companies. At present farmers cannot get insurance for the effects their crops might have on their livelihoods or the environment.

“ **UK farmers are turning away from organics because the subsidy system is biased** ”

SUPERMARKETS AND ORGANICS

UK farmers are turning away from organics because the subsidy system is biased against them and because supermarkets make more money by importing cheap organic produce from abroad.

Supermarkets are not supporting our local farmers, whether they be organic or not. The Department of Trade and Industry should force them to do so.

The larger supermarkets in the UK have a lot of power. At present they have reflected consumers' fear and supported a moratorium on the sale of GM crops. However, we do not feel that supermarkets have been active enough in allowing their consumers a voice on GM. They could have allowed their premises to be used for debates or the distribution of questionnaires. When we, the GM Jury, asked some major supermarkets to provide representatives to us they declined.

“ **When we, the GM Jury, asked some major supermarkets to provide representatives to us they declined** ”

Supermarkets claim to be acting in our interests yet we do not feel they genuinely have social or environmental interests at heart, nor have they asked for our opinions. They meet with the Prime Minister and make clear that they cannot be forced to sell GM by him, but do not commit themselves publicly to a policy of supporting non-GM agriculture because they fear that GM may eventually become inevitable and they will have to do an about-turn.

CROPS TRIALS AND COMMERCIALISATION: MAJORITY VERDICT

One member of the Jury suggested four options for decisions around the future growth of GM crops in the UK:

1. continue the moratorium on commercial GM crop planting, with a halt to official field trials.
2. continue the moratorium on commercial GM crop planting, continue official field trials.
3. lift moratorium on commercial GM crop planting, but only on a case-by-case basis, with strict regulation as described above.
4. undertake the commercialisation of GM crops immediately via the processes already in existence.

The majority of the Jury voted for option 2. In doing so they pointed out that the Jury, not to mention the wider public, had still not been given clear answers on a range of issues from the potential for genetic pollution to the possible existence of terminator technologies. The field trials should continue, they believed, because if no tests were carried out, we would never be able to make judgements on some of the key issues. A minority opted for option 3, suggesting that stringent regulations as outlined here would be a sufficient safeguard so long as GM crop developers had to make a case why the moratorium should be lifted for each particular crop.

Another minority opted for option 1, suggesting that further trials risked causing genetic pollution, that there was no

genuine demand for GM crops from farmers or consumers, and that the only reason any farmer grew GM was because they had been blackmailed or coerced into growing it. No-one voted for option 4, though there were some comments that GM crops were going to be introduced whatever the public said.

“ We in the developed world however must take a considered approach before releasing this technology to the developing world ”

GLOBALISATION- THE DEVELOPING WORLD AND DONOR INTERESTS

AVOIDING MORAL BLACKMAIL

We recognise that some developing country Governments see GM food as the ‘magic wand’ to end famine and the problems caused by poor nutrition. In some cases the introduction of GM technology could be of benefit to some farmers, allowing them to grow crops of a quality they would not otherwise have achieved. We in the developed world however must take a considered approach before releasing this technology to the developing world on a large scale. For example, in an article from Asia Focus circulated among the Jury by one of us, it was reported that Monsanto's GM cotton seeds led to the crop failure of 500,000 farmers, leaving their livelihoods in the lurch.

In particular the following points should be addressed:

“
small farmers are being forced to sell their land as they cannot afford not to use GM technology”

AGRICULTURE: Agriculture is about more than farming. It is about people and the way they use and interact with the land. We have seen how, in some countries, small farmers are being forced to sell their land as they cannot afford not to use GM technology - yet struggle to pay the licence fees required for its use.

RELIGION/CULTURE: We live in a multicultural world. What one religion regards as acceptable another does not. Buyers of GM food must be made aware of where foreign genes have come from and must be allowed to reject them on religious grounds. Some cultures reject the idea of consuming meat and fish, this further necessitates the disclosure of the source of all genetically modified material.

AID: Foreign aid is supposed to benefit the recipient nation, not the donor. We recommend that countries receiving aid be given the right, by the UK's Department for International Development, for example, to refuse GM food without penalty. The right to choose GM or non GM food should be dependent on the requirements of the recipient, not the donors' preferred choice of supplier, which may well be at odds with the religious or cultural traditions of the recipient.

PAYMENT: When the choice to grow GM food is made by a developing country we recommend that small farmers should be allowed to purchase the seeds free from the cost of licence fee or at a substantially reduced rate. The difference can be paid by the UN or other organisation. By making the technology available to farmers at a reasonable price the black market in GM foods which is developing in some countries would be greatly reduced. Finally, we request that as well as looking at ways to help developing countries feed themselves, we also recommend that the Department for International Development and Treasury look at other ways of helping in the short term. Such measures could include the redistribution of existing food surpluses and continuing along the path of cancelling the debts owed by these countries. If it is proposed to use GM crops as part of a package of foreign aid, we suggest that this should be overseen and regulated by the kind of independent bodies made up of a cross section of people that we describe above.

3B - HERTFORDSHIRE GM JURY CONCLUSIONS

OVERALL

We recognise that there may be potential benefits to GM technologies. However, these need to be clearly identified, quantified and set against the possible ecological, economic and health risks for people across the globe.

It is essential to build up long-term research such as carrying out further farm-scale trials and other confined studies. In the meantime the UK Government must apply the precautionary principle and not allow the commercialisation of GM crops or GM products, and thus keep the UK GM-free.

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There was unanimity that the import of GM foodstuffs from abroad should be stopped. Two secret ballots produced the following majority and minority conclusions:

- A majority of us thought that the UK Government should stop the import of all food from countries that grow GM crops,

- A majority of the jury also thought that the UK Government should stop the import of other non-GM crops if they were related to crops that grown using GM technologies
- A minority thought that the UK should not import anything from countries that grow GM crops.

ECONOMICS AND TECHNOLOGY

At the moment GM is used mainly for corporate-dominated farming using high amounts of artificial fertilisers and pesticides. The UN, WHO, DFID, FAO and other international agencies must re-focus research on Third World needs - i.e. instead of corporations deciding that products can be easily manufactured and then seeing how they can make people use them. They need to be made to turn around the logic and instead focus on what the needs of farmers and the environment are, and then develop products that will meet those needs.

If GM goes ahead as it is presently constituted it will increase corporate control of agriculture and the dependency of farmers on corporations. It will also increase the power of the rich countries over the Third World.

- We believe there are limited economic benefits for large farmers, such as the sugar growers in Guatemala who were described to us.
- There seem to be only negative impacts for small farmers. They find themselves unable to pay for continued use of the technology and get forced out of the market.

- Large scale farming may be more efficient, but it can lead to the loss of self-sufficiency for communities and makes them susceptible to price-crashes.
- The only possible consumer benefit we can see is that the cost of a product might go down.
- We know the cost of research and development is high for GM companies therefore they may exert pressure on governments to accept the technology.
- We think the technology is being developed in a rush.

“ If GM goes ahead as it is presently constituted it will increase the dependency of farmers on corporations ”

A majority of us thought that there should be legislation in the UK and elsewhere to ensure that there is a more equal sharing of liability between farmers who are currently liable for any negative environmental or agricultural impacts of GM and the GM corporations. A minority of us thought that all the liability should be transferred to the GM companies.

ENVIRONMENT, THIRD WORLD AND GLOBAL ISSUES

GM crops make farmers use more herbicides and pesticides and intensify the pressure on wildlife. We should only accept GM if it is part of a move away from the types of agriculture that use artificial chemicals. We

don't understand enough about the issues of cross-contamination in the small-scale farming systems of countries such as the UK.

“ GM crops make farmers use more herbicides and pesticides and intensify the pressure on wildlife ”

If one country grows GM others nearby can be affected, so the technology has to be dealt with at a global level. We should give the Third World more independence and do so by providing resources (financial support) to feed themselves.

Global hunger is a problem of distribution and affordability of food. Vitamin-enhanced foods may have a role, but the UK Department for International Development, and international agencies such as the UN need to prioritise distribution of resources that already exist.

FOOD AND CULTURE

GM is not the solution to hunger and famine — the promises do not seem to realised on the ground.

Poor farmers are pushed out of the market with GM crops because they encourage movement is from self-sufficiency to cash crops, export and large farms.

Third world countries should have a choice as to whether or not their food aid is GM. GM potentially allows us to have whatever qualities we want in our food but it increases the dependency on seed/chemical suppliers.

HEALTH

Testing is not currently carried out for long enough to assess toxicity levels. Therefore the level of health risk is unknown.

We cannot assume effects of new genes to be safe by the type of testing that has been carried out so far.

“
Testing is not currently carried out for long enough to assess toxicity levels”

More publicly funded health research is needed. In particular there should be further research into the effects on GM on foetuses and babies, funded by the EU, UK Department of Health, and environmental groups.

In Argentina there's a public health directive that children under 5 years old should not consume soya as this can induce anaemia. Yet, a Monsanto scheme called Soybean Solidarity - mentioned by our witness Walter Pengue - provides free GM soya to poor families, but this changes the normal diet of Argentineans and is detrimentally affecting the health of children. We are very concerned about this.

The UK Department of Health and local authorities should provide more education to secondary school children about a balanced diet and the issues surrounding GM technology.

“
a Monsanto scheme called Soybean Solidarity is detrimentally affecting the health of children”

Trading standards authorities need to introduce clear labels on foods to provide confirmation that the ingredients in it are GM free.

POLITICS AND ETHICS

The biotech industry is powerful/influential, and has already invested in GM. There is therefore a push for companies to recoup their investment — a financial driver.

People have a right to know what they consume, yet in many countries GM has been brought in via the back door.

There has not been enough political accountability and transparency on the GM issue. The government's GM debate has been no more than lip-service. We believe that the GM debate is only just beginning.

There should be an ongoing programme of public education around GM combined with the facility for public views to feed into future decisions.

The research process needs to be made more transparent. We need to know what they are researching. We cannot have faith in the benefits until we understand what is being researched.

4. BACKGROUND

INTRODUCING ACTION INQUIRY

Juries are not yet a common practice in academic research. They are a potentially powerful, and often controversial, means of creating a new space within the political process. Within this space, ordinary people - having become informed on a particular topic – have an opportunity to influence decision-makers. Although the jury in a court of law has long history, the GM Jury process reported here also draws on a more recent tradition that has often been described as action research or action inquiry.

Much academic research draws on a philosophy of inquiry originating in the so-called ‘positivist’ science of the Victorian era, where a subject is studied by an objective researcher. This individual then becomes a specialist whose findings, after a process of review, become accepted as valid. Yet those of us who study issues in which ‘non-specialists’, such as cancer patients or sheep farmers, have valid knowledge to contribute to the research process have become increasingly dissatisfied with these traditional approaches.

Primarily concerned with creating a fairer society, action inquiry (together with associated approaches such as participatory action research, and Reflect-Action) avoids the conventional division between those who are studied and those who do the studying. While accepting that there may be different levels of specialist

knowledge between different groups involved in a research project, action inquiry commits those who seek valid knowledge to researching with their fellow citizens, rather than researching on them. If people become co-inquirers - rather than remaining the inquirer and the subject who is inquired of - they are more likely to build mutual understanding with professional researchers. Used in conjunction with more traditional research practices, action inquiry therefore appears to have an important part to play in assisting positive long-term social and environmental changes.

“
**action inquiry
avoids the
conventional
division between
those who are
studied and those
who do the
studying**”

Though pioneered early in the twentieth century it is only since the end of the Cold War that action inquiry techniques have begun to be accepted as valid ways of producing socially-robust and useful knowledge. However the methods of social research that are still widely used by academics, corporations and Government are based on the traditional separation between a research subject, who exists only as a source of data, and a researcher who

interprets what these subjects think, or what their actions actually mean. The opinion poll and the focus group are the two traditional methods that have been used most widely in the recent GM debate. Many associated with the GM Nation process see it as one more of gathering social data, rather than giving ordinary people a real voice in decisions. This echoes the widespread perception of last major public consultation on GM, conducted by the Department for Trade and Industry (DTI) in 1998-99.

MARKET RESEARCH FROM A PARTICIPATORY PERSPECTIVE

The development of the opinion poll in the US in the 1930s, and its increasing use in the UK during the last fifty years, transformed the way politicians interacted with public opinion. During the early twentieth century, political candidates would argue the merits of their case face to face with voters either on the doorstep or at large public meetings. Though highly variable in quality, the kinds of discussions that took place in this direct form allowed voters some means of informing themselves about the issues on which they were voting via a more or less two-way exchange of information.

The decline of this direct contact between voters (except some lucky enough to live in marginal parliamentary constituencies) and those in power, was accompanied by a shift of resources by both Governments and competing political parties towards the skilful use of the mass media. Large scale opinion surveys replaced the more deliberative methods of communication between citizens and those who governed them. Increasingly political parties saw voters as consumers, to whom policies

could be marketed in exactly the same way as manufacturers market their products. Market research, rather than grassroots political debate, became the primary mode of understanding a voter's potential behaviour.

“**Market research, rather than grassroots political debate, has become the primary mode of understanding a voter's potential behaviour**”

Though apparently a radical departure from the opinion poll, the second market research tool that transformed political debate during the 1990s – the focus group – shares many of the characteristics with the earlier method. Having been used extensively by large corporations for market research from the 1950s onwards, focus groups allow researchers to get 'inside' the mind of those participating in them. With their client's particular interests in mind, the researcher attempts to explain how what participants say relates to what they really think, and how they may act. The potentially unethical aspect of such research from a democratic perspective is that it takes information, experiences and knowledge without allowing citizens their own space in which to articulate their views. Focus groups also usually fail to provide a balance of information, if any at all, on which citizens might be able to take a more considered view.

Focus groups along with other widely used consultation methods are justified by some researchers because such people view public opinion as a psychological, rather than a political, phenomenon. If a participant in a research process wishes to elaborate what they mean, after saying that they 'don't know enough' or 'don't care' about an issue, this should prompt a researcher to allow the participant a space to expand on their answer, which might arise from an alienation from those who have the power to take decisions on the issue. Such apparent apathy might also be triggered by a frustration at the lack of opportunities to influence the policy process.

A market research method such as an opinion poll, however, would merely accept the 'don't know' answer as something the researcher could record as valid data on their standardised questionnaire. A good focus group researcher would ask further questions of their subject, but all too often commercial or less conscientious researchers will accept an expression of ignorance or apathy at face value, which reinforces an often false impression among policy-makers that citizens can't be bothered to discuss issues vital to society when, in fact, they merely feel powerless.

Some social researchers who erroneously detect public apathy via such flawed methods have proceeded to call for 'anti-apathy' campaigns to get citizens to become less 'lazy'. One leading market research consultancy that specialises in public views on science policy has run focus groups that they seem to interpret as suggesting that leaving decisions to the experts is preferable because the public can't 'overcome their inertia'.

“ the central role of focus groups in the framing of the official GM debate appears to have been inappropriate ”

The use of focus group methods in both the DTI Public Consultation on Developments in the Biosciences (PCDB), conducted by Market and Opinion Research International plc (1998-9) and the focus groups conducted by Corr Willbourn Associates (commissioned by the Central Office for Information, overseen by the Public Debate Steering Board 2002), appear to suffer from being based on researchers' rather superficial judgements of what people really think, rather than allowing them the opportunity to reach their own informed opinion. Whilst these expert judgements may or may not represent people's actual opinions, they miss a vital democratic opportunity for people to decide and express what they think for themselves.

In summary, the key disadvantages of focus groups from a democratic perspective are that they usually fail to:

- allow the participants a voice except via the interpretation of their views by the researcher.
- provide information in the form of a witness that they can cross-question.
- provide the mechanisms of transparency or multi-stakeholder oversight that would be required for it to be trusted beyond those body that commissioned it.

While they certainly have a place in social research, and even in action inquiry where used appropriately, the central role of focus groups in the framing of the official GM debate appears to have been inappropriate. The House of Lords Select Committee on Science and Technology famously remarked that the PCDB in 1998-99 was ‘closer to market research than consultation’. The remark could have just as easily referred to the 2002 GM Debate focus groups. Following her first-hand observation of their use by Corr Willbourn, an expert member of the Public Debate Steering Board has criticised their use in the context of the Public Debate on GM for exactly this reason.

JUSTICE, JURIES AND CITIZENS

The jury has been a prominent feature of British life since at least the Middle Ages. The jury process we have developed at the PEALS Research Institute, a version of what is often called a ‘citizens’ jury’ is an attempt to combine the justice that can normally be achieved in a legal jury, with the opportunity for positive social change that comes from action inquiry.

The Magna Carta of 1215 promised England that ‘no free man shall be taken or imprisoned or dispossessed or outlawed or exiled or anyway destroyed ... unless by the lawful judgement of his peers’ This was the core principle of trial by jury that continues to this day in the UK, US, much of Europe and many other democracies such as Russia, Spain, Brazil and Australia.

Whilst elected governments make the laws, it is juries that are able to decide the innocence or guilt of anyone charged with breaking those laws, making it a key instrument of participatory democracy.

Over the centuries juries have achieved an importance to many democracies, yet their powers have often had to be fiercely defended. One senior judge surveying the power of juries to limit Government power over the centuries compared the jury to: ‘a little parliament... No tyrant could afford to leave a subject's freedom in the hands of twelve of his countrymen.... Trial by jury is more than an instrument of justice and more than one wheel of the constitution: it is the lamp that shows that freedom lives’. Lawyer, Jeff Abrahamson, suggests that, ‘no other institution of government rivals the jury in placing power so directly in the hands of citizens, or wagers more on the truth of democracy's core claim that the people make their own best governors’.

“ ‘no other institution of government rivals the jury in placing power so directly in the hands of citizens’ ”

Hundreds of so-called ‘citizens’ juries’ have taken place in the UK and elsewhere. Many have been little more than show-trials and expensive public relations exercises, but others have made a genuine contribution to enriching political debate by being exercises in what has been called ‘participatory democracy’.

Most clearly outlined by thinkers such as Jean-Jacques Rousseau, John Stuart Mill and G D H Cole, participatory democracy is distinct from representative democratic systems, such as elected members of parliaments or senates, in that it puts

decision-making powers more directly in the hands of ordinary people. Rousseau suggested that participatory approaches to democracy had the advantage of demonstrating that 'no citizen is a master of another'. Most important in the context of discussions relating to scientists feelings of being mistrusted and alienated from the rest of the population, Rousseau suggested that participation in decision-making improves relations within communities. In Western culture trial by jury is probably the most long-standing institution of participatory democracy.

Historians such as E.P. Thompson have described how the spontaneous use of citizen-led 'people's courts' to discuss issues of concern to the community goes back at least as far as eighteenth century England. During the English Civil War groups such as the Levellers and the Diggers campaigned to allow ordinary people - not just noblemen - to be allowed to serve on legal juries. The principle of justice being administered not by government, but by one's peers, was passed down in common law, later being revived by campaign groups such as the Luddites, who put pieces of industrial machinery 'harmful to the commonality' on trial in front of people's courts during the first decades of the nineteenth century.

“ Since being introduced to the UK in 1996, over one hundred citizens' juries have been held ”

Since being introduced to the UK in 1996, over one hundred citizens' juries have been held on issues ranging from healthcare rationing to education policy and taste and decency on television. The citizens' jury adopted in the UK is based on both German 'planning cells' and American citizens' juries, and it has many similarities to approaches in other parts of Europe. There has been a high level of diversity in the way the approach has been put into practice. Citizens' juries have now been used in many countries including Brazil, UK, Spain, Germany, India, New Zealand, Canada and Australia. Outside the US they are organised by a variety of different groups - governments and local authorities trying to acquire legitimacy for their actions, campaigners trying to demonstrate widespread and informed public support for their cause, and qualitative social researchers trying to gain greater insights into participatory governance and direct methods of democracy.

In a citizens' jury a representative panel of citizens meets for a total of thirty to fifty hours to examine carefully an issue of public significance. The jury, of between twelve and twenty members, serves as a microcosm of the public. They hear from a variety of specialist witnesses and are able to deliberate together on an issue. On the final day of their moderated hearings, the members of the jury present their recommendations to decision-makers and the public.

Citizens' juries have a number of features that distinguish them from other methods of participation:

- Participants are systematically recruited, rather than just being asked to turn up via an open invitation.

- Participants are given the opportunity to scrutinise the information that they receive from witnesses.
- Participants are given time to reflect and deliberate on the questions at hand, usually assisted by a facilitator.
- Acting as 'jurors', participants are expected to develop a set of conclusions or 'visions' for the future.

So-called 'scientific' opinion poll research and citizens' juries are thus based on different concepts of democratic representativeness. The representativeness of an opinion poll arises purely from the mathematics of random sampling. The concept of a citizens' jury relies instead on the representativeness of taking twelve citizens, more or less at random, and allowing them to deliberate on evidence to reach their final verdict. Because it is an informed decision, reached after extensive opportunity for deliberation, the verdict they reach is arguably of greater validity than if a question was asked of one thousand un-informed citizens. The method is designed to allow participants to represent their own views, which are formed after discussions with others.

“**opinion poll research and citizens' juries are based on different concepts of democratic representativeness**”

THE DIY JURY

One of the criticisms of citizens' juries, even to some extent the GM Jury described here, is that they are largely 'top-down' projects initiated by powerful funding organisations, without ordinary people being involved in setting the subject matter for their deliberations. To test the extent to which non-specialist groups could set an agenda for a jury process a recent UK research project has experimented with the concept of 'Do-It-Yourself' participatory processes. The first of these processes was designed by older people on Tyneside who were marginalised from political processes by various factors including disability, language and mobility. This steering group decided on the topic and scope of the first citizens' jury and helped decide which witnesses could best inform a randomly chosen jury. For more details see www.diyjury.org.

Various local and national Government agencies, along with some non-governmental organisations, have undertaken quick-and-dirty citizens' juries that seem to be aimed at generating sympathetic publicity and the appearance of public consultation. However, evaluations have questioned the extent to which many of them achieved representativeness in their selection of participants, transparency in their provision of information, or independence, given the limited extent to which jurors could express their opinions without them being channelled through the commissioning body. Some suspect that citizens' juries have sometimes been used as show-trials that allow those in power to avoid engaging in processes that might hold them accountable to communities.

SETTING THE SUBJECT

One of the most powerful, yet subtle, ways in which the co-option in participatory processes such as citizens' juries can occur is the wording of the question asked of participants. While seemingly innocuous to participants, it often sets the agenda for their subsequent discussions. This is particularly problematic in deliberations relating to new technologies in which non-specialist participants are already dealing with a technology the development of which they have usually had no part in shaping, yet is being tacitly assumed to be beneficial. For example, one citizens' jury was asked 'What conditions should be fulfilled before genetic testing for common diseases becomes available on the NHS'. According to Peter Glasner and his co-researchers, such a phrasing prevented meaningful discussion of the possibility that participants would oppose such testing whatever conditions had been fulfilled. The Food Standards Agency (FSA) 2003 citizens' jury, which asked a jury 'Should GM foods be available to buy in the UK', appears open to similar critiques (See Box 4 below).

In contrast to the use of public participation as a rubber-stamping procedure for decisions that have already been made, a range of different projects involving major institutions in the UK and for example India, have attempted to allow the co-determination of goals for research by specialists and non-specialists.

Funded by a major UK supermarket, a genetics think-tank and the Consumers Association, Citizen Foresight was an adaptation of a jury method that was carried out in 1998. It used a variant of multi-criteria analysis developed by Andrew

Stirling. Instead of providing jurors with a question on a particular technology, it asked them to list a series of options for the future of food and farming, following an open brainstorming session. Rather than focus on particular technologies such as GM crops, the twelve panel members were allowed to set the agenda for the jury to the extent of deciding what the most important criteria would be by which the desirability of different options could be judged. They were also allowed to ask for extra witnesses to be chosen to address issues that had not been anticipated by the Oversight Panel. The conclusions of this panel therefore reflected a more genuine societal choice than one which merely responded to a narrowly-framed question.

“ the ability of marginalised groups to set the agenda is very restricted ”

A more recent experiment in India used a scenario workshop model to allow a jury of small and marginal farmers to choose between three contrasting 'visions' for the future of food and farming in their region. These were illustrated by short documentary-style videos, which were followed by several witnesses in support of each vision. While the information provided to the jury was therefore clearly framed by the organisers, the jury were allowed to formulate their own vision called Prajateerpu (translated as 'people's verdict'), based on their deliberations. More details of this process are available via www.prajateerpu.org.

Even in relatively prosperous countries such as the UK, the ability of marginalised groups to set the agenda for research or policy-making is very restricted. In the aftermath of the foot and mouth disease crisis in the UK. The FSA and Department for Food and Rural Affairs (DEFRA) funded the National Consumer Council (NCC) to commission a participatory process whereby low-income consumers were asked what future they wanted for food and farming. At the time the workshops were undertaken, the FSA had already stated that those on low incomes set their highest priority on food being cheap, rather than high quality. The results of two separate 'Weekend Away for a Bigger Voice' workshops was that low-waged citizens articulated a sophisticated critique of the food system that challenged previous the previous FSA 'evidence-based' policy that low-income consumers prioritise cheapness of food above other criteria. However, the FSA has not yet published, and its evidence to Government has failed to cite the results of, this process.

CITIZEN SCIENCE

If designed appropriately juries can be useful democratic tools on controversial scientific issues such as GM, so long as:

- 1) They are overseen by representatives of organisations with a range of views on a particular controversy.
- 2) This Oversight Panel approves the witnesses who appear before the jury as being informative and balanced.

A well-designed jury process can avoid the common drawback of participation projects on scientific issues, which is the need to provide neutral 'stimulus material'. In real life people no longer acquire all the information they need to make a decision

from a single source and are unlikely to trust any information provider as being uniquely neutral. Quite apart from the problem of finding a set of lowest common denominator 'facts' that are not themselves controversial, presenting these 'neutral' statements to citizens carries the patronising implication that they are lacking an intelligent analysis of facts themselves. These officially approved facts, such as those apparently presented by Kathy Sykes in the FSA's citizens' jury (see Section 6, Box 4), are far less likely to provoke insight and analysis than the verbal presentation of a set of arguments by a range of witnesses with different perspectives, as is the case in a jury.

“ Having heard a range of views a jury is allowed to take a view on what it thinks are the facts of the matter ”

For those who retain the nineteenth century positivist mindset that there are objective scientific facts that merely need to be validated by experts and presented to the public, the jury is a practical demonstration of a different, more socially-robust, means of validating knowledge. Having heard a range of views on a subject from a variety of perspectives, a jury is allowed to take a view on what it thinks are the facts of the matter. Though they may have less qualifications than the professionals, the most common observation from legal trials is that the jury of ordinary people normally reaches the same conclusions as a group of independent experts, even in a technically complex case.

While few would wish to suggest that we do not need a variety of experts in society, each bringing valuable specialist knowledge, action inquiry methods such as juries are necessary ways of allowing other citizens - who may themselves be experts in some areas relevant to the subject - the space to assess the broad validity and applicability of such knowledge. We believe that the development of such democratic spaces are essential if public is to recover its trust in policies made around science and technology.

PRINCIPLES AND PRACTICES

Some of the principles of action inquiry used by PEALS are listed in Box 3. The compilation is drawn from documented literature from a variety of areas of practice including action inquiry, participatory action research, extended peer review and citizen-science dialogue. To illustrate the variety of practices we discuss three approaches relevant to the GM debate, consensus conference, DeMOCs and Learning Circles.

BOX 3: SOME PRINCIPLES OF ACTION INQUIRY USED BY PEALS

- Participants, not those organising the process, should be able to frame and set terms of reference for the whole exercise.
- The group organising, or in overall control of, the process should be broad based, including stakeholders with different interests on the subject being discussed.
- There should be a diversity of information sources and perspectives available to participants.
- There should be space for the perspectives for participants (who usually lack specialist knowledge of the area concerned) to engage in a mutually educative manner with those of specialists.
- There should be transparency of the activities carried out within the process to those both inside and outside it.
- The ability for those without a voice in policy-making to use the consultation process as a tool for positive political change should be embedded in the process.
- The process should contain safeguards against decision-makers using a process to legitimise existing assumptions or policies.
- All groups involved in the process should have sufficient room for longer-term learning, development and change.
- The group organising, or in overall control of, the process should develop an 'audit' trail through the process, to explain whether policies were changed, what was taken into account, what criteria were applied when weighing up the evidence from the process, and therefore how the views of those involved in the participatory process may have made a difference.

CONSENSUS CONFERENCES

The consensus conference, at least in the form currently practised in countries such as Denmark, the Netherlands, and, on two occasions, in the UK, is an enquiry involving 10-16 citizens who are charged with addressing a socially controversial topic after meeting a panel expert in the subject. However, the concept was originally developed in a different context.

In 1976, the United States Congress became alarmed at the rapid increase in health care costs. In response, the National Institutes of Health established a new mechanism to identify and assess the safety and efficacy of new medical technologies. These 'consensus development conferences' generally focussed on a specific technology, such as magnetic resonance imaging or dental implants. The conferences were exclusively composed of experts and after three or four full days of deliberation would produce a detailed and comprehensive analysis of the technology in question, including full references, an assessment of the quality of the data available and an explanation of the way in which differences of opinion were resolved. The model became widely used, not just in the US, but in European countries, such as Sweden and the Netherlands. By 1995, over 100 medical consensus conferences had taken place in Europe including ten in the UK, and a similar number in Denmark, France and Finland.

In the mid-1980s, having observed the success of the American model both in the US and in Denmark, the Danish Board of Technology decided to adapt the technique in order to 'bridge the gap between the general public, experts and politicians.' The terms of the adapted technique required

that a panel of non-expert citizens was asked to enter into an 'open and unbiased dialogue' having been provided with the 'best available knowledge'. Their final report was intended to inform decision-makers.

“ introduction of so-called 'lay' voices into the consensus conference procedure has changed its character markedly,”

The introduction of so-called 'lay' (i.e. non-specialist) voices into the consensus conference procedure has changed its character markedly. The format, combining lay investigation with expert testimony, has been used 13 times at a national level in Denmark, but only twice in the UK.

Unlike a focus group, the members of a lay panel become political actors with, at least to some extent, their own voice. Their investigations touch on questions of power, influence, knowledge-validity and responsibility in society. Furthermore, the citizens are thus asked not what is or is not the case, but rather what should or should not be done. They must therefore weigh up differing points of view and reach their own conclusions. In general, the citizens' panel is asked to reach a consensus, though this requirement has been applied more in the UK than in Denmark.

DEMOCS

The use of card games as a means to encouraging public deliberation has been a novel approach initiated by the UK's New Economics Foundation in the form of DeMO Cs (an acronym for deliberative meetings organised by citizens). A group of six to eight participants are asked to read some stimulus material and then discuss a series of issues as explained by different cards that emerge from a set that have been specifically designed – one subject per game. The main advantage of this approach is that it allows for a large number of people to be involved in games at very low cost compared to other citizen participation methods, especially if a facilitator is not present.

DeMO Cs can be particularly useful for situations where an organisation wants to encourage informed discussions among its members on a particular issue, such as its recent use by Oxfam to discuss global trade issues. It also tends towards informality and participants may feel less burdened than in other processes discussed here. However, it is yet to be shown how DeMO Cs could be made to contain the necessary ingredients to give them the perceived legitimacy to make an impact on policy. If a facilitator is present then its participatory characteristics appear very similar to that of a focus group in which stimulus material is used. Further details of DeMO Cs are available from www.neweconomics.org.

LEARNING CIRCLES / REFLECT

Reflect is an approach to learning and social change developed by projects largely funded by ActionAid, the UK's second largest non-governmental development

agency. Key to Reflect is creating a space where people feel comfortable to meet and discuss issues relevant to them and their lives. Reflect aims to improve the participation of people in decisions that affect their lives through strengthening their ability to communicate. Reflect is a process that aims to strengthen people's capacity to communicate by whatever means of communication are most relevant or appropriate to them. Part of the process may be about learning new communication skills. Reflect is a political process in which the multiple dimensions of power and stratification are always the focus of reflection, and actions are oriented towards changing inequitable power relationships whatever their basis.

“**Reflect is a political process in which actions are oriented towards changing inequitable power relationships whatever their basis**”

Reflect begins with respect and value for people's existing knowledge and experience. However, this does not mean accepting people's existing opinions or prejudices without challenge – especially where these contradict the principle of creating a democratic space. Moreover, there will always be part of the process in which participants are enabled to access new information and new ideas from new

sources. The key is to give people control over that process and confidence in their own starting point, so that they can be critical and selective. The Reflect process always aims towards self-organisation so that groups are self-managed, where possible, rather than being facilitated by, or dependent on, outsiders. Reflect or 'Learning Circle' processes are now active in approximately sixty countries worldwide, in many of which it has had significant policy impact, mainly at a tangible, local level. Further details and case studies can be found at www.reflect-action.org.

whether it is one of the funders or stakeholders who makes an impact (while supposedly drawing on what the citizens have said). The implication by organisations that an initiative has 'empowered' citizens by influencing policy should not be taken to imply that it is the citizens who have been allowed any control over this process of lobbying. Indeed the policy 'spin' put on a participatory process by its funder when reporting to policy-makers can sometimes contradict the main thrust of the recommendations that the citizens involved believed they had reached.

COMPARISONS FOR THE GM DEBATE

The following chart (Table 1) provides a qualitative comparison of the relative levels of citizen and multi-stakeholder control in processes of citizen participation and action inquiry. It gives examples of recent uses of these tools in debates around biotechnology, where relevant. Just because a process receives 'low' ratings does not necessarily negate it as a useful tool. For example, if a researcher wants to achieve a basic understanding of public opinions on a subject quickly and cheaply, without deliberation or outside sources of information, a focus group can be extremely effective. However the low level of citizen control over the process, and the lack of multi-stakeholder oversight, means its impact as a practice of citizen empowerment will be limited.

The column referring to the control citizens have over whether their conclusions 'make an impact' is based on an assessment of whether it is the citizens involved who have used the report to have an impact – a particular aim of action inquiry practices, or

Table 1: A qualitative comparison of the relative levels of citizen and multi-stakeholder control in citizen participation processes related to biotechnology

		Level of citizen control over process					Level of multi-stakeholder oversight over process				
Example		Deciding on the focus of the discussion	The choice of method of discussion or research	The acquisition of information	Making sense of the information	Using own conclusions to make an impact	Selection of information	Recruitment of participants	Monitoring of meetings	Follow-up processes	
Focus Group	GM Nation "foundation" workshops 2002	LOW	LOW	N/A	LOW	LOW	N/A	LOW	MODERATE	LOW	
	BBSRC, Plant Bio-technology 1994	LOW	LOW	MODERATE	HIGH	LOW	LOW	LOW	LOW	LOW	
Standard practices	Demos game	LOW	LOW	LOW	HIGH	LOW	LOW	LOW	LOW	LOW	
	Citizens Jury	LOW	LOW	MODERATE	MODERATE	LOW	LOW	LOW	LOW	LOW	
DIY Jury	PEALS and citizen groups 2003	HIGH	MODERATE	HIGH	HIGH	HIGH*	HIGH	HIGH	HIGH	HIGH*	
	Learning circle/Reflect	HIGH	HIGH	HIGH	HIGH	HIGH*	N/A (local communities build own validity mechanisms in long term action-learning process)				
Some examples of hybrid practices relevant to debates on biotechnology	Citizen Foresight 1998	HIGH	LOW	HIGH	HIGH	MODERATE	HIGH	MODERATE	HIGH	LOW	
	DTI Developments in Biosciences 1999	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	
	Weekend Away for a Bigger Voice, NCC/DEFRA/FSA, 2001	HIGH	MODERATE	MODERATE	HIGH	HIGH	MODERATE	MODERATE	HIGH	MODERATE	
	Speaking Out, Royal Society 2002-3	LOW	LOW	MODERATE	HIGH	LOW	LOW	LOW	LOW	LOW	
	GM Nation Workshops 2003	LOW	LOW	N/A	LOW	LOW	N/A	MODERATE	HIGH	MODERATE*	
	GM Juries 2003	MODERATE	LOW	MODERATE	HIGH	HIGH*	HIGH	HIGH	HIGH	HIGH*	

* refers to potential if aims are realised
joint action inquiry involving the Royal Society and PEALS

5. PRELIMINARY ANALYSIS

THE VERDICTS

To help the various audiences of this report appreciate the analysis undertaken by the jurors, and the full meaning of their verdicts, this section emphasises the significance of some of their main conclusions. We are aware of the danger that their results become altered, however unintentionally, into something they did not intend, and so the following section is subject to revision by the eight representatives of both Juries, who will have the opportunity to discuss it on 8 September, 2003.

MAIN CONCLUSIONS

Each GM Jury reached its verdict independently of the other. Their full conclusions can be studied in full in Section 3 of this report. The two verdicts broadly agree, in that both Juries call for:

- A halt to the sale of GM foods currently available, and to the proposed commercial growing of GM crops. This conclusion is based on the lack of evidence of benefit and the precautionary principle.
- Long-term research into the real risks of damage to the environment and the potential for harm.
- An end to blanket assertions that the GM crops are necessary to feed the starving in the Third World, given the complex social and economic factors that lie behind such hunger.

These verdicts were reached by jurors who were briefed on GM from a diverse group of acknowledged experts in the relevant subjects. The choice of these 'witnesses' was approved by stakeholders with vested interests on either side of the GM debate.

RELATED CONCLUSIONS

Juries on GM often reach verdicts that go beyond the technological aspects of the subject. Such jury conclusions have importance for a wide range of decision makers. GM Jury verdicts included:

- A critique of current conventional agricultural practices based on high-inputs of fertilisers and pesticides.
- A proposal for support systems for agricultural techniques that do not rely on artificial chemicals, such as organic farming
- A call for incentives to encourage retailers to act in the interests of smaller and organic UK farmers, rather than to import food from abroad.
- A call for bodies that regulate new agricultural and food technologies to be made fully accountable to citizens, together with specific proposals for reform.

WIDER ISSUES

While the four areas listed above have been raised in previous exercises, other issues raised by these two GM Juries were new. They included:

- A condemnation of the way in which the elected Government has merely paid ‘lip service’ to public debate on such a major issue as GM, together with suggestions of specific mechanisms whereby such debates could be improved.
- Concerns that Government communication and media coverage does not give sufficient weight to the importance and complexity of the GM issue, together with suggestions of organisations whose remits could be expanded to address this.
- Proposals to curb the power of large agro-chemical corporations to impose new technologies on farmers and consumers, with little regard to what those farmers or consumers – whether in the industrialised or Third Worlds - actually need.
- The need to transfer risks that may arise from GM technologies away from farmers -who currently have to sign contracts that make them liable for problems – and towards the corporations that have developed the technology.
- A concern that the gradual privatisation of scientific research is threatening the independent regulatory assessment of GM technologies, together with a call for future research to be more accountable to the population.

“ The fact that these wider issues emerged is a direct consequence of the way in which the GM Jury process held back from providing the jurors with a specific question ”

The fact that these wider issues emerged is a direct consequence of the way in which the GM Jury process held back from providing the jurors with a specific question they had to answer (see Section 4). By explaining the context in which the GM debate was taking place, jurors were able to judge for themselves the range of appropriate conclusions they could reach.

A BRIEF COMPARISON BETWEEN THE TWO VERDICTS

Though they heard from the same witnesses, the two Juries chose to emphasise slightly different issues in their final reports. In Tyneside, Jury members were particularly keen to discuss the potential impact of GM for organic farming and the impact of foreign aid on smaller farmers, especially in poorer parts of the world. They were also critical of supermarket policies, both on GM and public consultation related to GM, and were especially keen to outline how a watchdog on GM issues might be made publicly accountable. Unlike Hertfordshire,

their verdicts on commercialisation of GM crops and Government field trials was not unanimous, the majority being against commercialisation, but in favour of continued field trials.

In Hertfordshire the inadequacy of current testing of GM foods for the safety of human health was a particular concern for many of the jurors. They suggested that small farmers in the less industrialised world would be particularly hard hit, and pointed to the unethical practices of a particular GM corporation. Whilst being unanimously against the import of GM foods, they were divided as to how far-ranging the ban should be on other materials that might have become GM-contaminated.

“ Unlike Hertfordshire, their verdicts on commercialisation of GM crops and Government field trials was not unanimous ”

COMPARISON TO OTHER GM JURIES

The unique feature of the GM Jury process has been the holding of simultaneous juries which have received evidence from identical witnesses. Rather than compressing all the evidence and deliberation into three intensive days as often occurs in commercial juries – which is generally done in order to minimise costs - these GM juries were spread over ten sessions spread over six weeks. Several of

the jurors in each location used the time between Jury sessions to gather their own evidence - from friends or family, the newspapers or broadcasts. Our provisional conclusion is that this ability to gather evidence from sources outside their formal hearings increased the quality of the Jury’s deliberations.

“ Several of the jurors in each location used the time between Jury sessions to gather their own evidence ”

By avoiding the practice of setting a specific question to the jurors (see Section 6, Table 4), the GM Jury process allowed the Jury to focus on the issues that they thought were important, rather than viewing all the evidence through the lens of a question that risks pre-determining the answer.

LEARNING LESSONS FROM THE GM JURY PROCESS

Funders of participatory processes – from small community groups to large funders such as ActionAid - are increasingly moving away from a reliance on external evaluators as guarantors of the quality of a process. Given that they are paid for and accountable to the funders rather than the participants, and because they are rarely present throughout a process, the extent to which the traditional type of evaluator can provide information that is useful, especially for the participants, is extremely limited.

Meetings at which participants in an action inquiry process can reflect on how it might be improved in the future, but also examine how they can ensure that their conclusions make an impact on decision-makers, are an increasingly widespread alternative practice to formal 'external' evaluations. They are often more effective in ensuring that the overall aim of the process - to give ordinary people a bigger voice - is addressed. The use of a single evaluation in a GM Jury might have given an assessment of the facilitation or balance of witnesses from one particular perspective. However, the GM Jury sessions were overseen and attended on two occasions by its funders and members of the Oversight Panel. Together with the presence of a complete video archive and the contrasting vested interests on the Oversight Panel we believe this to be a more transparent means of safeguarding the quality of the process than any single evaluator.

At the presentation of their verdict on 8 September, 2003 eight representatives of the jurors will have the opportunity of reflecting on the process with members of the Oversight Panel, which is likely to lead to both groups entering into a constructive dialogue about the way ahead. Future steps for the GM Jury process might include further hearings or more sustained interactions decision-making organisations.

“ the GM Jury sessions were overseen and attended on two occasions by its funders and members of the Oversight Panel ”

6. GM JURY: THE WAY AHEAD

The GM Jury process has been part of a range of processes that have claimed to give ordinary people a way of inputting into the GM public debate (see Section 4, Table 1). What they have all demonstrated, though the quality of participation has varied widely, is that ordinary people in the UK have concerns about GM that relate not only to the technology, but to the system of democratic governance in the UK. On this issue the Juries clearly feel that the elected Government is out of step with the views of its electors and with a balanced assessment of the evidence.

Given the considerable number of exercises similar to the GM Juries that have taken place in other countries, we would also wish to draw attention to the international level of consensus among a wide range of citizens on this issue. The juries that have been carried out in less industrialised countries such as India, Brazil and Zimbabwe should be given at least as much attention by our Government as the recommendations on these issues made by the UK GM Juries. For details of these processes see www.gmjury.org.

Creating a perception of the 'voice of the people' is as old as politics itself. Various institutions now have the power to undertake pseudo-consultations that convince themselves – even if not the rest of us – that they have taken public opinion on board. Commenting on the GM Nation debate, a recent editorial in the Times (4 June, 2003) reflected a widespread perception that 'promising to consult the

public is the perfect way to put off making a decision or to provide cover for an unpopular decision that has already been made'.

“ The juries that have been carried out in less industrialised countries such as India, Brazil and Zimbabwe should be given at least as much attention by the UK Government ”

The original guidelines for citizens' juries, piloted by the Institute for Public Policy Research in the early 1990s, contained safeguards against them becoming pseudo-participatory exercises. The two most important such safeguards are that juries should be overseen by stakeholders with different vested interests on the subject under discussion, and that focus of the jury verdict should be decided by the jury, not the funder. Yet of the hundred or so that have taken place over the past ten years, only a handful have contained these safeguards.

BOX 4

THE APRIL 2003 FOOD STANDARDS AGENCY 'CITIZENS' JURY'

During April 2003, the FSA commissioned what it called a 'citizens' jury' from a division of the public relations firm Bell Pottinger plc (also known as Chime plc). In contravention of standard practice for citizens' juries, no panel of stakeholders was assembled to oversee balance and fairness in the jury process. Senior staff at the FSA stated that it was itself an independent agency and had been advised by Bell Pottinger that no such oversight panel would be necessary.

A major disadvantage of not having drawn on a broad range of interest groups for oversight of the jury process became apparent when the question was set for the jury to consider. This was announced by the FSA as 'Should GM Food be Available to Buy in the UK?' One of the witnesses to the jury immediately objected to this question, commenting that 'with a question like that I can predict a 'yes' verdict without even needing to give evidence'. Not only was this question open to the accusation of being skewed, like some opinion poll surveys, towards getting a particular answer, but it is likely to have severely limited the scope the jurors had to discuss a range of issues relating to the links between GM technologies, the food system and farming that they - rather than the FSA - might have thought were pertinent. Citing advice from Bell Pottinger, the FSA 'disagreed that it is good practice to allow jurors to set their own agenda'.

It is possible that the facilitation of the FSA jury by Bell Pottinger counteracted what appears to be a rather loaded exercise, but the FSA has not yet made its video archive publicly accessible, so it is difficult for others to know what went on in the sessions. There has been no evaluation report published to date, or re-convening of the jury that might have allowed them evaluate the process, and their impact on policy, themselves.

Given that the more open technique of jury framing used in the GM Jury has now been used successfully on numerous occasions, we recommend it should no longer be standard practice for citizens' juries to be given a one line question such as the one given to the FSA citizens' jury. We also believe that it is misguided for any organisation organising a jury process to believe itself so independent that it can forgo the transparent oversight mechanism that a multi-stakeholder panel provides.

“**Spreading the use of these practices beyond local and national government agencies would help build capacity for participatory democracy in the whole of society**”

the kind of power-equalising action research undertaken here will be a useful contribution to linking citizens’ visions to the choices made by decision-makers.

Non-governmental organisations in the UK, such as consumer and environmental groups, have only rarely used juries - or other action inquiry practices - on issues where they are trying to achieve policy changes. We believe they can have an important role in the discussion of major social and environmental issues and hope those groups who have been associated with the GM Jury will undertake similar initiatives in the future. Spreading the use of these practices beyond local and national government agencies would help build capacity for participatory democracy in the whole of society.

We are currently in discussion with both the funders of GM Juries and the Oversight Panel in the hope that we can all continue our mutual learning process with the jurors and witnesses. Such a sustained interaction could play a part in the democratisation of the GM debate. Such an initiative could also potentially lead to an exchange of learning experiences with other groups who are trying to bring citizen perspectives to other areas of policy-making. We hope that

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The PEALS Team responsible for this report are Tom Wakeford (co-ordinator), Pauline Wilson (consultant facilitator), Tom Shakespeare (adviser), and Fiona Hale (adviser). We regret any errors or inconsistencies, for which we take responsibility. The views expressed do not necessarily represent those of the funders.

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The People's Report on GM Crops has been compiled by:



**Policy Ethics And Life Sciences
Research Institute (PEALS)**
 Bioscience Centre
 Times Square
 Newcastle-upon-Tyne
 NE1 4EP

Tel: + 44 (0)191 241 8614
 Fax: + 44 (0)191 243 8233
www.peals.ncl.ac.uk

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