



# **Policy Dialogues on Genetically Modified Crops in Europe: Insights for African Policy Dialogues on Biotechnology**

**Regina Birner** – International Food Policy Research Institute

**Gabriela Alcaraz** - University of Göttingen

**DRAFT<sup>1</sup>**

**A background paper prepared for the second session of the  
*African Policy Dialogues on Biotechnology – Southern Africa***

**Meikles Hotel, Harare Zimbabwe**

**September 20-21, 2004**

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<sup>1</sup> The paper has not been peer-reviewed. The paper should therefore be read and cited in the recognition that its contents may change following peer review.

# **Policy Dialogues on Genetically Modified Crops in Europe: Insights for African Policy Dialogues on Biotechnology**

Regina Birner and Gabriela Alcaraz<sup>2</sup>

## **Abstract**

Genetically modified (GM) crops are a highly contested technology in most member states of the European Union (EU). In line with a tendency towards more public participation in policymaking, a variety of participatory technology assessments, stakeholder consultations and policy dialogues on biotechnology and GM food have been conducted in Europe during the last decade. In this paper, we review five such processes in order to derive insights for the NEPAD/IFPRI initiative to establish a platform for “African Policy Dialogues on Biotechnology.” We review (1) the “Discourse Green Genetic Technology” held in Germany, which engaged 30 stakeholder organizations in a dialogue process, (2) the “Swiss Publiforum on Genetic Technology and Nutrition”, which involved a citizen panel of 28 members and followed the Danish “consensus conference” model, (3) a large-scale debate in the UK called “GM Nation? The Public Debate”, which involved more than 20,000 participants, (4) the “Public Debate on GM Crops and Field Trials” in France, which involved 230 stakeholder representatives and 120 citizens, and (5) the “Public Consultation Towards a Strategic Vision of Life Sciences and Biotechnology” organized by the European Commission, which involved a stakeholder conference involving 320 participants and around 320 comments submitted by internet or mail. We analyze the potentials and problems of these approaches focusing on information, legitimacy, social dynamics, and cost-benefit considerations. After presenting some considerations on the applicability of the European experiences in the African context, we recommend (1) to pay special attention to the challenge of creating legitimacy for the dialogues, (2) to use a policy dialogue approach focusing on stakeholder organizations, (3) to make efforts to have all relevant interests represented, (4) to establish clear rules of fairness at the beginning of the process that are agreed upon by all participants, (5) to value different types of knowledge, (6) to promote transparency, e.g., by inviting comments from the public and (7) to promote policy dialogues and research at the national and sub-national level, which can inform the dialogues at the supra-national level.

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<sup>2</sup> Birner (corresponding author) is a Research Fellow with the International Food Policy Research Institute, 2033 K St., NW, Washington DC, 20006, USA. Tel: 1-202-862-5600. Email: r.birner@cgiar.org. Alcaraz is a Research Assistant with the Institute of Rural Development, University of Göttingen, Waldweg 26, D-37073 Göttingen, The authors gratefully acknowledge the helpful comments of Heidi Wittmer from the Center for Environmental Research in Leipzig (UFZ).

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## 1 Introduction

The application of biotechnology to agriculture, especially the cultivation of genetically modified (GM) crops, has emerged as a highly controversial policy issue. From a global perspective, one can observe a far-reaching polarization between North America, where policies and regulations encourage the use of GM crops, and the European Union, which adopted a precautionary approach.<sup>3</sup> In this polarized international environment, African countries face difficult choices about the policies to adopt regarding biotechnology. As in industrialized countries, different interest groups have conflicting views regarding the potentials and challenges of biotechnology. However, in Africa, as in other developing regions, policy choices on biotechnology are further complicated by a number of additional factors such as food insecurity, a limited regulatory capacity of state institutions, and the influence of donor interests.

Against this background, it is not surprising that there is no consensus among African countries concerning biotechnology policy. To provide a platform for African countries to engage in a dialogue and seek a consensus on a common biotechnology strategy, the New Partnership for Africa NEPAD and the International Food Policy Research Institute (IFPRI) are currently establishing a regional platform called “The African Policy Dialogues on Biotechnology.” The aim of the platform is to support a structured regional process for a multi-stakeholder dialogue, consensus formation, and adoption of common policies and strategies on biotechnology (IFPRI, 2004). In support of the establishment of this platform, the Steering Committee of the initiative invited papers that derive lessons from multi-stakeholder dialogues in other regions of the world. The objective of the present paper is to analyze selected multi-stakeholder processes on biotechnology in Europe with a view to what can be learnt from them for the African Policy Dialogues initiative. The paper is based on published information concerning these dialogues, such as reports, statements of participating stakeholders and analyses of such processes. Most of the information was available from the Internet (see reference list).

## 2 Multi-Stakeholder Dialogues on Biotechnology in Europe

In view of the controversial nature of agricultural biotechnology in Europe, numerous public discussions and debates involving the various stakeholders have been conducted in European countries since the early 1990s. One can distinguish between single events such as public hearings, panel discussions, conferences and workshops, and structured processes that attempt to engage stakeholders for a certain period of time in an ongoing process of exchange and discussion. Since the African Policy Dialogues initiative envisages a structured process, we focus here on this type of policy dialogues.

In several European countries, such policy dialogues were organized by **Technology Assessment Agencies**, which serve to inform policy makers about different types of controversial and risky technologies. In other cases, policy dialogues on biotechnology were convened by consultancies or special advisory committees on biotechnology on behalf of governments or parliaments. In view of the societal controversies that have characterized the introduction of various new technologies in

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<sup>3</sup> See Bernauer (2003) for an excellent analysis of this regulatory divide.

Western Europe, such as nuclear energy, different **methodologies** have been developed to integrate citizen participation and stakeholder deliberation in technology assessment. Examples include citizens' juries and consensus conferences, mediated modeling, cooperative discourse, and multi-criteria evaluation in deliberative workshops (see Rauschmayer and Wittmer for a review). The participatory technology assessment approaches developed in Europe are largely influenced by the "rational discourse" approach of Jürgen Habermas (1981). Table 1 presents a set of widely used rules for consensus-oriented participatory approaches, which have been derived from this approach.

**Table 1: Principles for Consensus-Oriented Participatory Approaches**

<b>Clear Mandate</b>	The questions to be answered by the participants, their tasks as well as competences must be defined and accepted at the beginning.
<b>Timing</b>	A clear time plan allows all participants to define and accept their input. The time must be sufficient to discuss the relevant topics without time pressure.
<b>Equal Rights and Duties</b>	All participants are put on the same level during the discourse activities. Hierarchic structures, competences and power relationships outside the discourse are no reasons for privileges or specific rights during the activities.
<b>Rationality</b>	Emotional arguments as well as moral statements about the positions of other participants often block consensus arrangements. Therefore, such statements should be avoided and transformed into discussible arguments.
<b>Feed-back</b>	Interim as well as final results must be distributed among the participants as well as made available to the public since the transparency of the approach is an important element of its legitimation. In addition, there should be an agreement who are the target groups for the results as well as the mode of transmission at the beginning of discourse activities.

Source: Beckmann and Keck (1999), quoted in Gaisser et al. (2002: 7)

At the **European level**, one can also observe a policy shift in recent years towards an increased participation of civil society organizations and citizens in technology assessment (Abels, 2002). The White Paper on European Governance published in 2001 called for involving civil society organizations in consultation processes, an objective that has been officially established by the Aarhus Convention. In 2002, the EU Commission published general principles and minimum standards for consultation of interested parties in order to foster a "culture of consultation and dialogue." (Commission of the European Communities, 2002b). The shift towards public participation and stakeholder dialogue in the assessment of controversial technologies at national and European level has been interpreted as an element of deliberative democracy. The increasing emphasis public participation certainly reflects a deficiency of the conventional institutions of representative democracy to deal with the management of risky and controversial technologies.

An internet-based review of **policy dialogues on biotechnology** in Europe indicated that most dialogues were held at the national and sub-national level. Various of the above mentioned methodologies were applied, including those focusing on lay

persons, such as citizen juries, and those focusing on interest group representatives or a combination of both. In the European research project ADAPTA (Assessing Debate and Participatory Technology Assessment), which ended in 2000, a comparative analysis of participatory biotechnology assessment processes was conducted for six European countries.<sup>4</sup> The authors of that study found that the forms of public participation differed considerably among countries, and were crucially linked to the political environment, especially the culture of openness in the policy process.

In order to capture the diversity of different types of stakeholder dialogues and to focus on more recent processes, the country cases listed below were selected for the purpose of this paper. At the European level, a stakeholder consultation process was conducted in 2001. Since this process is particularly relevant with regard to the African Policy Dialogues initiative, this case was included, as well.

### **1) Germany: “Discourse Green Genetic Technology”**

- Dialogue process among representatives of 30 stakeholder organizations at the national level, involving two workshops and five discussion rounds held in 2001, initiated by the German Ministry for Consumer Protection, Agriculture and Nutrition, conducted by a Steering Committee elected by the participating organizations with the support of an independent consultancy.

### **2) Switzerland: “Publiforum on Genetic Technology and Nutrition“**

- Technology Assessment process by a citizen panel of 28 lay persons, a group of 17 “reference persons” representing experts and interest groups, and an accompanying group that served as a “watch dog”. The process was based on the Danish “Consensus Conference” model and was organized in 1999 by the Technology Assessment Program of the Swiss Science Council.

### **3) UK “GM Nation? The Public Debate”**

- Public Debate involving 675 meetings at different levels and 1200 letter and e-mail contributions, initiated by the State Secretary for the Environment, Food and Rural Affairs in 2002/2003, following a recommendation of the Agricultural and Environment Biotechnology Commission.

### **4) France: “Public Debate on GM Crops and Field Trials”**

- Public debate based on internet contributions and a two-days consultation workshop with six round tables, involving 36 experts, 230 persons representing stakeholder organizations, and 120 citizens. The process was organized in 2002 by a Committee appointed by the Ministry of Agriculture and Fisheries.

### **5) EU: “Public Consultation Towards a Strategic Vision of Life Sciences and Biotechnology”**

- Public consultation process based on 316 internet contributions from individuals and stakeholder representatives, and a two-days stakeholder conference involving 320 participants. The process was organized by the EU

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<sup>4</sup> The countries included the UK, France, the Netherlands, Denmark, Portugal and Germany. The final report as well as the country reports is available at the project website:  
<http://www.inra.fr/Internet/Directions/SED/science-gouvernance/pub/ADAPTA/index.html>.

Commission as part of an action plan aimed at developing a European Strategy on Life Sciences and Biotechnology.

### **3 Conceptual Framework**

Box 1 shows the questions that were used to characterize the different dialogue processes. The different cases are briefly described according to these guideline questions in Table A in the Annex. In order to provide more detailed information for the African Policy Dialogues initiative, the German, Swiss, UK and EU cases are described in more detail in Chapters 4 to 7. The French case is only described in the Table in the Annex, because the procedure was rather similar to that of the EU case. Box 2 displays the guideline questions used to derive lessons for the African Policy Dialogues initiative from the case studies.

## **4 The German Discourse on “Green Genetic Technology”**

### **4.0 Background**

In the public debate in Germany, the term “Green Genetic technology” is used to refer to applications of biotechnology in agriculture, especially GM crops.<sup>5</sup> In Germany, the debate about this technology has been characterized by rather polarized positions between opponents and supporters since its beginnings (Gaisser et al., 2001). While the supporters focused on lobbying as major political strategy, the opponents applied different strategies of public protest, including the frequent destruction of trial fields where GM crops had been planted. Stakeholder dialogues at the national level took place in the framework of technology impact assessments commissioned by the Parliament from 1984-1987 and by the Ministry of Research and Technology from 1991-1993. There were also several stakeholder dialogue processes conducted at the state level. For example, the Center of Technology Assessment of the state of Baden-Württemberg organized a citizen jury in 1995 (see Gaisser et al., 2001, for a review).

In 2001, the detection of cattle infected with BSE (mad cow disease) led to a major crisis in consumer confidence in Germany. Subsequently, the Green Party, junior partner in Germany’s coalition government, took over the Ministry of Agriculture. The government announced a major turn in agricultural policy towards more consumer protection, increased support to organic agriculture and restrictions to „industrial types“ of food and livestock production.

### **4.1 Organization of the dialogue**

1.1) In the framework of the turn in agricultural policy described above, the new Minister for Consumer Protection, Nutrition and Environment Renate Künast invited stakeholders in 2001 to a “Discourse on Green Genetic Technology” (*Diskurs Grüne Gentechnik*). As reasons to start the discourse, she highlighted health concerns and ethical considerations of the consumers and the need to find rules for the co-existence of GM and non-GM crops that are feasible in the European and international context. She assured the participants in the beginning that the result of the dialogue would be open.

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<sup>5</sup> For applications in medicine, the term „Red Genetic Technology“ is used.

## **Box 1: Questions to Characterize Dialogue Processes**

### **1) Organization of the dialogue**

- 1.1) Who convened / organized / financed the dialogue? Which role did the dialogue play in the political system? (voluntary initiative, part of formal legislative procedure, etc.)
- 1.2) Was a specific methodology used (e.g., consensus conference, etc.)?
- 1.3) Who participated in the dialogue? How were participants selected?  
Distinguish the following categories:
  - Representatives of organized interest groups (private sector, NGOs, etc.)
  - Researchers
  - Elected policy makers
  - Members of the public administration
  - Ordinary citizens
- 1.4) Number of meetings and duration of the process?
- 1.5) Type of final document/product prepared?
- 1.6) Resources spent to organize the dialogue?

### **2) Issues covered and process of the dialogue**

- 2.1) Which issues were covered in the dialogue?
- 2.2) How were the issues selected?
- 2.3) Which input was provided to the dialogue? (type of background papers, scientific papers, stakeholder positions, etc.)
- 2.4) Which procedures were used to discuss contentious issues? (moderation techniques, etc.) Were decision-support tools (e.g., models) used?
- 2.5) In which way were different positions included in the final document/product?
- 2.6) How did the relations between stakeholders change during the process? Did partnerships evolve? Did participants leave the dialogue process? If so, which reasons did they give?

### **3) Impact of the dialogue**

- 3.1) In which way was the outcome of the dialogue used? (e.g., informed legislative process)
- 3.2) Which dissemination strategy was applied? (e.g., press conferences, etc.)
- 3.3) How did the conveners/organizers assess the outcome and impact of the dialogue?
- 3.4) How did participants evaluate the outcome/impact of the dialogue?
- 3.5) Is there evidence that participants changed their position as a result of the dialogue?

## Box 2: Criteria to Derive Lessons for African Policy Dialogues

### 1) What were the strengths and weaknesses of the different dialogues?

*Dealing with different types of knowledge and with uncertainty*

- How were different types of knowledge included – integrated?
- In which way was uncertainty taken into account?

*Legitimacy*

- Representation: Were all relevant stakeholders represented?
- Transparency: Were rules and assumptions transparent to insiders and outsiders?
- Accountability: Was someone held accountable for the process and its outcome?

*Social Dynamics*

- How did the approach affect the relationship between the different stakeholders? Was there scope for empowerment? Were conflicts increased or reduced?
- Did social learning take place?

*Cost-Benefit Considerations*

- Did the approach take the cost-effectiveness of proposed solutions into account?
- Were the costs of the approach itself in proportion to the problems considered?

### 2) To which extent is the approach applicable to African dialogues?

- Fit into political system and political culture (incl. prospects to feed outcomes into political processes)
- Organizational requirements (resources needed, organizational capacity of stakeholders required, problems of “interest capture”, etc.)

### 3) Which recommendations can be derived?

- Which elements of the different dialogues should/should not be applied?

Source: Based on Rauschmayer and Wittmer, forthcoming

1.2) The Discourse was not conducted according to a specific methodology (such as a consensus conference), but was based on a Discourse Concept that specified the rules of interaction (see Box 3), the tasks of the Steering Committee and the role of the consultancy that moderated the discourse. The consultancy interviewed all participants individually concerning their expectations.

1.3) The participants of the discourse were selected by the Ministry and included the following three groups:

- Representatives of 30 interest group organizations, including organizations of the biotechnology and seed industry, farmers’ organizations, environmental organizations, consumer organizations, including the organization of housewives, science organizations, labor unions, organizations of the Protestant and the Catholic Church, and other interest groups, such as the bee keepers’ organization. The representatives elected a Steering Committee of 10 persons. The Committee was chaired by a member of the Ministry. A representative of the German

Research Council (*Deutsche Forschungsgemeinschaft* DFG) participated as observer.

- Representatives of different Ministries (Consumer Protection, Nutrition and Agriculture; Health; Environment; Science and Education; Chancellor's Office). These representatives participated in the dialogue as observers.
- 53 experts from different fields, who provided input to the workshops and discussion rounds.

The interested public was informed about the ongoing discourse by press releases, a web page and a newsletter. An internet forum was provided to allow interested citizens to submit comments. It is, however, unclear whether and how these comments influenced the process.

1.4) The dialogue lasted from December 2001 to September 2002 and was divided into two phases:

- *An introductory phase*, which included a meeting at which the Minister opened the dialogue, the selection of the consultancy for the moderation of the discourse, the election of the Steering Committee, and a public hearing organized by the Ministry.
- The *discourse phase*, which started with a conference to clarify national, European and international issues, and continued with five discussion rounds dealing with the guideline questions and topics agreed upon; the results were presented at a final workshop, where the participants also had the opportunity to present their assessment of the process.

1.5) The results were documented in form of a report and published in printed form and on the internet. The documents contributed by the participants were published on the internet, as well. The minutes of the discourse rounds were also published on the internet, after approval by the participants.

1.6) The resources spent on the dialogue were not published.

## **4.2 Issues covered and process of the dialogue**

2.1) The dialogue covered the following five topics:

- Protection of biological diversity
- Innovation potential and future prospects of Green Genetic technology
- Benefits and risks for consumers and producers
- Conditions, opportunities and consequences of not using Green Genetic technology
- Information, public participation and freedom of choice

2.2) The topics were selected by the Steering Committee.

2.3) As information material for the dialogue, the moderation provided a reader which presented an overview of scientific, economic, ethical, social and juridical issues of GM applications in agriculture. This document was updated in the course of the dialogue. The participants provided additional documents, which were printed and/or published on the website of the dialogue. 53 researchers and experts from different disciplines provided input during a public hearing and a workshop and during the discussion rounds.

2.4) In the discussion rounds, the moderation used the metaplan technique in order to identify (1) issues on which the participants reached a consensus, (2) issues on which there was disagreement, and (3) open questions that have priority from the participants' perspective. The moderation commented that this procedure was suitable to document major trends in the public debate and served as a basis for the continuation of the discussion. It could, however, not capture the breadth and depth of the discussion (BMVEL, 2002: 23).

2.5) The final report documented for each field on which issues the participants reached a consensus, on which issues they disagreed and which open questions with priority they identified.

2.6) All organizations participated in the discourse until it was finished. In an earlier technology assessment procedure in Germany, the environmental NGOs had left the process in protest.

### **4.3 Impact of the dialogue**

3.1) The dialogue was used to inform policy makers and the interested public. The advantage for the policy makers certainly was that they had a clear documentation of the position of different constituencies. Several speakers referred to the discourse during the parliamentary debates held for the revision of the German Genetic Engineering Law in 2003. Thus, the dialogue informed the legislative process.

3.2) The dissemination strategy included a final conference with press coverage, where the results were presented and the participants assessed the discourse. Moreover, as indicated above, the process was documented by press releases and an intensive publication of material on the website of the discourse.

3.3) At the final conference, the Minister highlighted that the discourse served to clarify and document the positions of all stakeholders involved. She emphasized that she was surprised to find consensus on some topics where she had not expected a consensus (without specifying those issues). Apart from this official statement, it is not known how the Ministry assessed the outcome of the dialogue.

3.4/5) Some of the participating organizations criticized that the discourse did not lead to a change of opinions. Even though this is not to be expected in a dialogue involving interest group organizations, it was nevertheless considered as a drawback of the discourse.<sup>6</sup> Representatives of the biotechnology and seed industry complained that the discourse once again raised the fundamental question of *whether or not* to use GM technology instead of discussing *how* to use it. They also complained that, in spite of the resources and efforts spent for the discourse, not even a "minimum consensus" was reached on questions such as co-existence of GM and non-GM crops. Opponents of GM crops, such as Greenpeace, criticized that the discourse had not led to any "real progress." Some of the participating organizations highlighted in their assessment that the dialogue created a useful forum for interaction and discussion among different stakeholder organizations, which had not been available before. They indicated that the discourse created a basis for establishing contacts and facilitated a continuation of the discussion.

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<sup>6</sup> See the position statements of the participating organizations at: <http://www.transgen.de/diskurs>:

#### 4.4 Some Observations

- The high degree of organization of interest groups, including the existence of umbrella organizations favored this approach. For example, there is an „Organization of Housewives“ at the national level.
- Consulting organized interest groups is an important element of the political culture in Germany.
- The moderation of the discourse was carried out by an independent consulting firm, which appears to have been accepted to be neutral by all stakeholders concerned.

#### Box 3: Rules of Fairness in the German Discourse on Green Genetic Technology

- The participants reach a consensus on the topics to be discussed and the procedures of the discourse.
- Available scientific information is included in the discourse.
- The participants give continuous feed-back on the minutes documenting the results of the meetings.
- The participants provide information on their press and public relations activities, and on potential conflicts which may jeopardize the discourse.
- Personal statements in non-public discussions are not disclosed.

Source: BMVEL (2002: 6-7)

## 5 The Swiss Publiforum on “Genetic Technology and Nutrition”

### 5.0 Background

In 1998, a coalition of environmental, animal-rights, farming, and political groups supported by 111,000 citizens released the “Genetic Protection Popular Initiative”, which called for an amendment of the Federal Swiss Constitution with regard to the practices of genetic manipulation. The initiative proposed to ban all research activities involving transgenic animals, to restrict research with transgenic plants, and to forbid the patenting of genetically modified organisms (Koenig, 1998).

The opponents of this initiative, namely academics, researchers, and the industry, initiated a campaign to inform the public about the potential benefits of research on biotechnology. During this time, they realized the enormous gap between science and society, and the significant interest of the public in the topic. In June 1998, the initiative was rejected by 67% of the voters, but genetic technology remained a controversial topic.

In face of this situation, the Swiss Science Council perceived the need to continue with the discussions and in 1999, the Council organized the “Publiforum on Genetic Technology and Nutrition”<sup>7</sup>.

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<sup>7</sup> Final report available in:

[http://www.ta-swiss.ch/www-remain/reports\\_archive/publications/1999/ta\\_p\\_1\\_99\\_e.pdf](http://www.ta-swiss.ch/www-remain/reports_archive/publications/1999/ta_p_1_99_e.pdf)

## **5.1 Organization of the dialogue**

1.1) The Publiforum was organized by the Technology Assessment Program of the Swiss Science Council and had two main goals: to mediate between the standpoints of researchers, industry interests, political decision-makers and the general public in order to promote mutual understanding; and to give citizens a chance to express their views and recommendations on the subject.

1.2) The dialogue was organized according to the “Consensus Conference” model developed in Denmark. The idea of a consensus conference is that a panel of “ordinary citizens” (lay persons) discusses a controversial issue and identifies to which extent a consensus can be reached. In their deliberations, the citizens consult experts. The citizen panel report serves to inform policy makers and the general public.

1.3) Three types of groups participated in the Swiss Publiforum:

- An “accompanying group” (15 members), which was formed by representatives of the industry, research organizations, the administration, the media, politics and NGO’s. Their task was to provide a neutral framework for the forum. They helped in the preparation of the event and in a balanced selection of the participants.
- A “reference persons” group (17 members), comprised by professionals from scientific and research circles, representatives of authorities, interest groups and the industry. They were chosen out of 79 candidates and had the task to answer the questions posed by the citizen panel.
- The Citizen Panel (28 members), which was composed by “ordinary citizens”. Several thousand randomly chosen persons were invited by mail to participate. Only 60 persons applied for taking part in the dialogue and from them, 28 were chosen with the goal to create a mixed and balanced group.

1.4) The dialogue included two preparatory weekends in March and May 1999, and the Publiforum, the working meeting of the citizen panel held in June, 1999. During the preparatory weekends, the citizen panel received lectures and information about genetic technology in general, and about its legal, political, and ethical aspects. The panel also identified the specific questions which were to be answered by the reference persons. The Publiforum took place in Berne from the 4<sup>th</sup> to 7<sup>th</sup> of June, 1999. The first two days were devoted to the discussions and the remaining two were used for the preparation and presentation of a final report with the main conclusions.

1.5) The dialogue was documented by the final report that describes the organization of the forum, the results obtained for each selected topic, the programme followed, and lists of the members of the three groups involved.

1.6) The resources spent for the organization of the event were not published.

## **5.2 Issues covered and process of the dialogue**

2.1) The forum focused on six main topics:

- Research
- Ecosystems
- Health
- Ethics
- Business and industry

- Legislation and legal compliance

These topics were addressed by focusing on questions related to potential risks of GMOs; supervision of research activities and definition of research goals; consequences for Switzerland of a ban on GMOs; influence and long term effects of GMOs on ecosystems; goals, economic potentials and risks of genetic engineering in agriculture and food production; risks to consumer health; ethical points of view; consequences of GMO-patenting; regulations for development and marketing of GM products; liability and labelling regulations; tests for GMOs prior to registration; and issues related to the import of GM foodstuffs.

2.2) The topics and specific questions were selected by the citizen panel during the preparatory weekends. Once defined, they were communicated to the reference persons who were had to provide a 10 minutes answer during the Publiforum.

2.3) In order to clarify the topics and to guide the discussion, the citizen panel received information sheets written by scientific journalists with general information related to genetic technology. They also received brochures, newspapers, books and magazines. Furthermore, during the preparatory weekends, lectures were held for the panel, as indicated above.

2.4) The procedure used for the discussions was not explained in detail in the report. A professional was in charge of the moderation. He had the task of guiding the discussion and of assuring a balanced participation. Due to the diversity of languages within the group, all discussions were accompanied by simultaneous translations.

2.5) For each question, the report presented the panel's summary of the answers given by the reference persons, and the panel's opinions and recommendations. In cases where no agreement was found, the report presented the positions of the majority and the minority groups.

2.6) No information was available about a change in the relationship between the stakeholders. The accompanying group certainly provided an opportunity for direct interaction among organized stakeholders.

### **5.3 Impact of the dialogue**

3.1) The objective of the Publiforum was to inform decision makers in the Parliament, the government, and the industry. To which extent the results were indeed used in legislative processes and in designing industry policies is, however, not clear from the available information.

3.2) The results were first presented at the end of the forum. Afterwards, the report was presented in different parliamentary commissions and several articles were published in the press. The final report and other articles were shared with NGOs and other institutions working on the topic. A documentary film was produced during the forum to facilitate the communication of the results.

3.3) Representatives from the Technology Assessment Program expressed satisfaction with the results obtained. They considered the report as an evidence that the "man or woman on the street" is able to express his/her opinions on complex subjects and to contribute to decision processes on controversial topics. According to the organizers, the use of the consensus conference approach is beneficial and suitable for incorporating the citizens' opinions in decision processes.

3.4/5) No information on the evaluation by the participants was found. It is likely that the citizen panel members formed an opinion and changed their opinions during the process, because the methodology explicitly aims at promoting social learning. It is less likely that stakeholder organizations, which participated in the accompanying group and as reference persons, changed their opinion.

#### **5.4 Some Observations**

- The intensive preparation of the citizen panel members allowed them to enter the deliberation process well informed. This certainly improved the quality of the deliberations. However, as compared to the UK case described below, the number of citizens who had the opportunity to express their opinion was low.
- The possibility of the citizen panel to choose the questions and to analyze the information given by the reference persons may have given them a higher “ownership” feeling, in contrast with other types of debates and consultations in which the participants have a more passive role.

## **6 “GM Nation? The Public Debate” in the UK**

### **6.0 Background**

In face of the high relevance and the controversial nature of GM food, the UK has launched several initiatives for assessing the public’s views on the acceptability of GM food. The most far-reaching event was the public debate held in June 2003, which took place prior to potential far-reaching changes in public policy in the EU context (compare the German case above). The “GM Nation?” debate was the first nationwide public discussion on GM issues. It was considered as an “unprecedented event” because it differed considerably from the conventional rather formalized and not very inclusive model of stakeholder consultation practiced in the UK (GM Nation, 2003: 10).

### **6.1 Organization of the dialogue**

1.1) The dialogue was organized on the request of the Secretary of State for the Environment, Food and Rural Affairs (Margaret Beckett), following the recommendations of the Agricultural and Environment Biotechnology Commission (AEBBC). As indicated above, the goal was to allow the public prior to potential policy changes to express their opinions in a more pro-active way than by just responding to an agenda set by others. The debate took place in June 2003 and was organized by a Steering Board “at arm’s length” from the government. The Board was comprised by a mixed group of experts with different perspectives on GM issues and with expertise in public engagement.

1.2) The debate had three main components and a number of additional elements, as described below:

**1) Foundation discussion workshops:** This component comprised nine grass-root workshops in local communities. In these workshops, six main topics were identified and used as a framework for the nation-wide debate. 13 separate questions on the benefits and costs of GM crops were formulated. These questions were included in the feedback forms prepared for the debate. Each workshop had between 18 and 20 participants.

**2) Open debate:** In the open debate, a series of meetings were held at different levels:

- Tier 1: 6 national and regional workshops, organized by the Steering Board;
- Tier 2: 40 county level workshops organized in cooperation with the County Councils,
- Tier 3: 629 local level workshops, conducted by local organizers using a toolkit developed by the Steering Committee. A minimum attendance of 30 persons was necessary in order to consider the meeting as “official”.

In addition, people could also express their views by mail or e-mail, and by answering a feed-back form.

**3) “Narrow-but-deep element”** (as cross-check for the open debate, in order to avoid the “capture” of the open meetings by special interest groups): Regular moderated discussions of representative groups of citizens, who were exposed to the topic over a period of two weeks.

**Additional events:** Additional consultations, including two citizen juries, were conducted, as well.

The methodology was designed especially for this debate and followed a number of principles: (1) The public rather than experts framed the issues to be debated. (2) While the participants in the open debate were self-selecting, the participants of the discussion foundation workshops and of the “narrow but deep” element were selected in such a way that they represented the society in the UK. (3) The debate involved a large number of citizens *directly* in the debate (see below). (4) Cross-checks to avoid interest capture were put in place (feed-back forms, narrow-but-deep element). (5) Professional observers served as rapporteurs for Tier 1 meetings. (6) Additional civil society activity was stimulated in the course of the debate. (7) Different forms of participation (meetings, internet and mail, feed-back forms) were made possible and – unlike in other cases – all contributions were analyzed for the final report.

1.3) As indicated above, the participants in eight of the foundation workshops and in the narrow-but-deep phase were chosen to be representative of the general public of the UK. One discussion foundation workshop was attended by persons actively related to GM topics. The participants in the open debate were self-selecting and represented persons who had an interest on the topic and/or on public participation events. An estimated number of 20,000 persons participated in the meetings, and a total of 1,200 letters or e-mails and of 36,557 feedback forms were received (51% in hardcopy, 49% via internet).

1.4) The Discussion Foundation Workshops were held in November 2002 in Manchester, County Down, Ludlow, Reading, Norwich, Bromsgrove, Edinburgh and North London. They lasted for three hours. The debate was launched on June 3<sup>rd</sup> 2003 and took place for six weeks. In total, 675 meetings were organized in England, Scotland, Wales and Northern Ireland.

1.5) To document the debate and its results, the Steering Board prepared a final report entitled “GM Nation? The findings of the public debate”. The report incorporated the results derived from the open debate and from the discussion groups. In addition, it included information related to the feedback forms, the composition of the Steering Board, the location of the events, and a breakdown of expenditures. The analysis of the results was mostly qualitative. Numbers and percentages were used if the data could be accurately presented in a quantitative way, and if it supported the understanding of the qualitative results.

1.6) The organization and execution of the debate was financed by the Secretary of State for the Environment, Food and Rural Affairs, who authorized a budget of approx. £ 500,000.

## **6.2 Issues covered and process of the dialogue**

2.1) 13 topics were identified during the discussion foundation workshops, which were used as a framework for the entire debate. The issues were related to:

- possible costs and benefits of GMOs,
- consumer choice,
- health,
- environment,
- ethical issues, and
- implications for developing countries

The topics identified in the discussion foundation workshop that involved stakeholder representatives differed from those involving ordinary citizens. The suggestions from both groups were considered for the debate.

2.2) In the meetings held during the open debate, the participants were free to choose the topics under discussion, but the topics defined in the discussion foundation workshops served as a guideline, and provided the input in form of 13 closed questions for the feedback forms.

2.3) In order to stimulate the discussion, the organizers provided informative material on the topics. The inputs offered included a short video, a summary arguments in favor and against GM products, and a variety of documents and information on different aspects of GMOs. As indicated above, the organizers of Tier 3 workshops could use this information in form of a toolkit. The information was also available on the website of the debate.

2.4) Professional moderators were in charge of the Tier 1 meetings, while the meetings at lower levels relied on voluntary moderators. At all tiers, the meetings were held as round table discussions based on the debate stimulus material. The usual format involving formal speakers and voting was avoided. The reports on the meetings at the different levels, the written contributions and the feed-back forms were analyzed by the Steering Board and their staff in order to document the views and opinions expressed in the final report. The debate focused more on revealing and expressing public opinions than on reaching a consensus.

2.5) Based on the analysis of the different types of contributions, the final report described in separate sections general and specific arguments against GMOs and in favor of GMOs. The report also extracted key messages and provided ample documentation about the process of conducting the debate. It also included an analysis of the feed-back forms.

2.6) The report does not provide information about the change of relations among the stakeholders, which would be difficult in view of the large number of participants. Due to its wide scope, the debate certainly created awareness and facilitated direct contacts between stakeholders at local, regional and national level.

### **6.3 Impact of the dialogue**

3.1) In view of expected policy changes in the European context, the debate was organized to inform the British government about the public's opinion with regard to GMOs before a potential policy modification. The report was supposed to serve as a supporting tool for decision makers. Since the debate was conducted comparatively recently, there is not much information available on the extent to which policy makers indeed considered the results of the debate. Due to its large scope and its publicity (more than 20,000 participants in the public meetings), this type of policy dialogue is much less likely to be ignored by policy makers than the Swiss citizen panel report prepared by less than 30 citizens.

3.2) The results of the debate were published on the debate's website, printed documents, CD-Roms, and press releases.

3.3) The organizers assessed the debate as successful according to the following indicators:

- Extent of public awareness;
- Views of the participants about the debate and organization;
- Views of informed commentators about the organization, credibility, and transparency; and
- Ability to present the public views in the final report, and to make them clear to the decision makers.

3.4) According to the report (GM Nation, 2003: 23-24), the participants were, in general, glad to have had the opportunity to express their views and opinions in the debate. They felt that it was a good approach to organize such kind of debates and interpreted it as evidence their opinions are valued and will be taken into account. However, there was also criticism that the timing of the debate was not appropriate, that some population segments were under-represented (e.g., students and ethnic minorities), and that the discussion in some meetings seemed to be controlled by dominant groups in favor or against the genetic technology, which influenced the results of the meetings. Some were suspicious about the motivations of the debate and attacked it as "window dressing" for government decisions already made.

3.5) Some of the participants in the narrow-but-deep phase changed their attitudes towards GMOs during the process. This was evaluated by comparing their respective feedback forms at the beginning and at the end of the debate. The "narrow-but-deep" element, which consisted of a series of meetings of well informed citizen groups, certainly provided better possibilities for social learning than the other elements of the debate.

## **7 EU Public Consultation: "Towards a Strategic Vision of Life Sciences and Biotechnology"**

### **7.0 Background**

Compared to the USA and Canada, the European EU has adopted a precautionary strategy to GM crops. In view of widespread concerns in EU member countries, the EU had practiced a *de facto* moratorium on GM crops, which started in 1998 and ended only in 2004, after regulations on labeling and co-existence of non GM and GM food were put into place. In March 2001, the EU Commission announced to the Council of Ministers its intention to present a Communication setting out a strategic vision for life sciences and biotechnology up to 2010, and proposing how to address

ethical issues.<sup>8</sup> In this Communication, which was published in 2002, the Council expressed its concern about the passive and re-active role that Europe had taken with regard to life sciences and biotechnology. The Commission formulated the need for developing a shared vision and taking up a more pro-active role, which would allow European countries to exploit the potential of these new technologies “in a responsible manner, consistent with European values and standards.” (Commission of the European Communities, 2003: 3).

## **7.1 Organization of the Dialogue**

1.1) In order to prepare the Communication mentioned above, which includes a Strategy and Action Plan for Life Sciences and Biotechnology, the Commission launched on 4 September 2001 a public consultation process. The Commission pointed out that the public consultation was in line with its policy on governance.

1.2) No specific methodology was adopted for the public consultation. The process started with the publication of a policy document, to which comments could be submitted by post, fax or e-mail. Contributions in English, French and German that were not longer than two pages were published on the website of the consultation. In addition, a two-day stakeholder conference was held in Brussels.

1.3) The possibility to send contributions sent to the Commission was open to the general public, so that a self-selection took place. 316 contributions were received, mostly from Belgium, Germany, France, the UK, Austria and Italy. Contributions from Spain, Portugal, Greece and Ireland were particularly low. The following list shows the composition of the participants by type of contributor.

- 117 ordinary citizens. The analysis by the Commission showed that many of them were professionals in the area of biotechnology. However, they registered themselves as ordinary citizens;
- 79 academics;
- 60 NGOs and civil society organizations;
- 41 biotechnology groups and business representatives
- 9 public and semi-public organizations
- 7 farmers’ organizations, and
- 3 consultants.

The Stakeholder Conference in Brussels was attended by almost 320 participants from the scientific world, consumer and environmental protection associations, biotech and health companies, and the media. Political decision-makers from EU institutions, the member states, and (then) candidate countries also participated. Forty speakers classified as high-ranking in the report addressed the conference. They included members of the European Parliament and of the Commission.

1.4) The policy document inviting contributions from the public was published in July 2001. Contributions were received between September 4 and November 23, 2001. The stakeholder workshop in Brussels was held from September 28-29, 2001. The Communication, to which the consultation contributed, was published in January 2003.

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<sup>8</sup> See [http://europa.eu.int/comm/biotechnology/introduction\\_en.html](http://europa.eu.int/comm/biotechnology/introduction_en.html).

1.5) The Commission published a report, in which the contributions were analyzed. This report provided simple statistics on the contributions and identified points of consensus and points of disagreement regarding the topics discussed. The report also analyzed in broad terms the positions held by the different participant categories (see 1.3 above). The results of the stakeholder workshop were published in form of a report, in which rapporteurs summarized the contents of the different sessions. The contributions of the participants were also published. All documents were available on the website prepared for the consultation.

1.6) No published information on the resources spent for the consultation process was found.

## **7.2 Issues covered and process of the dialogue**

2.1) The public consultation covered not only applications of biotechnology in agriculture, but also in the health sector. In the field of agriculture, the topics listed below were covered by the contributions submitted. The report prepared by the Commission divided the topics according to points of consensus, debate and conflict, as follows:

Points of Consensus:

- Mobility of scientists and research policy, role of education
- Improving public information and consultation
- Amending the regulatory framework
- Food safety
- Application of the precautionary principle
- Support for developing countries

Points of Debate

- Benefits of biotechnology
- Role of experts in risk evaluation
- Research
- Organization of the public debate
- Specific European approach or harmonization

Points of Conflict

- “Patenting life”
- Ethical issues
- European trade policy

The Stakeholder Conference in Brussels was organized in the following four workshops:

- 1) Potential and Research
- 2) Innovation and Competitiveness
- 3) Regulation and Governance
- 4) Public Perception, Ethical Implications

2.2) The general issues to be discussed were selected by the Commission and treated in the policy paper published to launch the consultation. In their analysis, the Commission tried to reflect the diversity of the contributions received. The Commission also decided on the program and the keynote speakers of the Stakeholder Conference.

2.3) The major input for the dialogue was a policy paper entitled “Towards a Strategic Vision of Life Sciences and Biotechnology”, which covered the main issues to be discussed, raised the main questions and asked for comments and opinion. The document was published in 11 languages on the website of the dialogue process.

2.4) According to the available information, no specific moderation techniques were used for the consultation and the Stakeholder Conference.

2.5) As indicated above, the positions expressed in the contributions were divided into three groups – consensus, debate and conflict, and listed as such in the report on the results. In the report of the Stakeholder Conference, the rapporteurs provided an assessment concerning the degree to which there was consensus or conflicts on different points.

2.6) There is no evidence that the relations between stakeholders changed during the process, which is not surprising since the format chosen allowed for a comparatively low interaction between the participants.

### **7.3 Impact of the dialogue**

3.1) In a short section in the final report concerning the use of the consultation, the Commission noted that “noted that “it adopts a number of positions on points raised in the consultation”, but did not specify these positions. (Commission of the European Communities, 2002: 19).

3.2) The results of the consultation and the related documents were published on the respective website and distributed through the usual EU communication channels to the member states. No information was available whether further efforts to disseminate the results of the strategy were made.

3.3) No published information could be found on the evaluation of the process by the stakeholders. Analyses of the biotechnology politics of the EU acknowledge an increased openness for participation, even though the meaning of participation is still criticized as being too narrow (Abels, 2002).

3.4) No information could be found on whether or not participants changed their opinion during the process. Since the approach chosen allowed for comparatively little interaction between the participants, is not designed to facilitate “social learning.”

## **8 Strengths and Weaknesses of the Different Dialogues**

### **8.1 Overview**

As the description of the four cases above, and the overview of the five cases (including the French case) in Table A in the Annex shows, the policy dialogues differ considerably with regard to the methods used. The German case was a stakeholder consultation focusing on **organized interest groups**. Lay persons were not directly involved in this process. The Swiss case is as an opposite example, because it focused on the deliberation of **ordinary citizens** (lay persons), who consult experts and then derive policy recommendations. The role of organized stakeholders was limited to making sure that the process was balanced. The debate organized in the UK involved lay persons, stakeholder organizations and experts, but on a much larger scale. While the Swiss and the German case focused on groups that were considered to **represent** the public, the UK debate pursued a more **direct** approach. Holding

more than 670 meetings at different levels, the goal in the UK was to actively engage a considerable part of the population in the dialogue. All three cases have in common that they engage at least a part of the participants in an ongoing process of interaction involving several meetings. In the French and the EU case, the interaction of the participants was limited to **internet-based contributions** and to **one stakeholder conference**.

In the following, the strengths and weaknesses of the different dialogues are assessed on the basis of the guideline questions presented in Chapter 3.

## 8.2 Dealing with different types of knowledge and with uncertainty

The dialogues differ with regard to the extent that different **types of knowledge** were integrated. In all dialogue processes, **expert knowledge** played an important role. Expert knowledge and research results informed the process both through documents provided before and during the discussion process and through presentations held by experts. The cases differed, however, with regard to the extent and the form in which the **knowledge and perceptions of ordinary citizens** were taken into account. The citizen panel approach in Switzerland provided a systematic opportunity to include this type of knowledge. In the French, UK and EU case, individual citizens could also contribute their knowledge and opinions, but in a less structured way. In these cases, the citizens expressed, however, some doubts whether the information derived from the dialogue would indeed be considered in the political decision-making process. The German approach did not foresee using information from ordinary citizens, but focused rather on the **knowledge provided by interest group organizations** in addition to expert knowledge.

Concerning the information provided by experts, participants in different dialogues criticized the lack of clear, neutral and comprehensive information about genetic technologies in every-day life. Since research results on GM crops, especially with regard to biosafety, are controversial, most dialogue processes made efforts to invite experts with different positions. In the European context, one has to take into account that the **trust** of the population in scientific knowledge on biotechnology is comparatively low. The Eurobarometer survey of 1996, a large-scale representative survey held in EU member states, held in 1996 included the question: “Who can be trusted to tell the truth about biotechnology?” In case of food biotechnology, more than 25 % of the respondents trusted environmental organizations, while only 6 % trusted Universities. The trust in national public bodies was even lower (Biotechnology and the European Public Concerted Action Group, 1997).

All dialogue processes addressed the question of **uncertainty and risk**, especially with regard to biosafety and consumer health. The question of risk assessment is particularly important for GM crops, since there is a considerable debate concerning the extent to which risks are “only hypothetical” and the extent to which the precautionary approach is justified. The dialogue processes left the question on how to deal with risk mainly to the assessment of the participants. Special techniques of participatory risk assessment, such as multi-criteria mapping, had been used in the UK earlier (Stirling & Mayer, 1999), but were not applied in the processes analyzed here.

### 8.3 Legitimacy

Creating legitimacy is a major challenge for policy dialogue processes. Inviting the participation of stakeholders and citizens is often a mechanism, by which policy makers attempt to increase the legitimacy of contested policy choices in controversial fields. This approach bears the danger of a “token participation” (misusing participatory approaches and stakeholder consultation to legitimize predefined policy choices), especially if the process is not organized by an independent body that is considered to be neutral by those concerned. The literature on participation suggests that three **principles** are crucial for achieving legitimacy in participatory processes and stakeholder consultations: (1) Representation of all relevant stakeholders, (2) transparency of the rules and assumptions to participants and outsiders, and (3) accountability of those organizing the process to participants and outsiders (see Box 2 above in Chapter 3).

#### 1) Representation

The representation of all relevant stakeholders is a particular challenge, which includes the challenge to determine who is a “relevant stakeholder.” In case of agricultural biotechnology, the number of groups whose interests are affected is large, as above case studies show.

In the German case, the approach to meet this challenge was to invite a very broad range of **stakeholder organizations**. This approach is especially useful, if – as it is the case in Germany – all types of relevant stakeholders, including consumers, are formally organized at the national level. In the citizen panel approach applied in Switzerland, the strategy to meet the challenge of representing all relevant interests was to select a panel that reflects the **diversity** of the society, using criteria such as occupation, age and gender, and to compile a group of reference persons, which reflect the diversity of stakeholder opinions. Moreover, an accompanying group with stakeholder representatives served as a “watchdog” for the representativeness of the Swiss approach.

Since the number of persons involved in a citizen panel is necessarily small, the legitimacy of this approach is largely influenced by the **political culture** of the country in question. While this approach enjoys high legitimacy in Nordic countries, where it was originally developed, an earlier effort to use the consensus conference model in the UK was criticized as “tokenism” and “lacking in any real democratic role” (Weldon and Wynne, 2001: 7). The UK approach described here, which involved a **large number** of discussions at different levels all over the country, seemed to be better suited for achieving legitimacy in the UK context. The French and the EU cases can be considered as intermediate efforts, as they involved both lay persons and interest group organizations.

Strategies that rely to a large extent on **self-selection** such as the EU case and the open debate component in the UK case are not very well suited to guarantee the representation of all stakeholder groups. In the UK, efforts to reach a balanced view were made in the discussion foundation workshops and the “narrow-but deep” element. In the EU case, the voice of groups that have less access to internet-based communication techniques and are less familiar with getting access to policy procedures at the European level were less likely to be heard. Dedicated efforts to invite stakeholders that are not “selecting themselves into the process would have been a strategy to overcome this problem. In any case, one has to acknowledge that

ensuring and adequate representation of all stakeholders at the **supra-national level** magnifies the challenge already experienced at the national level.

## 2) Transparency

Concerning transparency, one can observe that there were considerable efforts in all cases under consideration to make the rules and procedure public both to the participants and - mostly using the internet technology - to the wider public, as well. The German case shows that the **agreement on clear rules** in the beginning of the process helps to create legitimacy even in contexts where the relation among the participants is characterized by long-standing conflicts. While some of the participants expressed doubts on the practical usefulness of the discourse project, the legitimacy and fairness of the exercise was not questioned.

Even processes that did not foresee the inclusion of lay persons in the dialogue itself, such as the German Dialogue, distributed **information to the public** by e-mail newsletters and provided an opportunity for the public to make comments through an internet platform. While such processes are useful to increase transparency, one has to acknowledge, that groups with less access to this technology, e.g., the elder and socially disadvantaged groups, are less likely to be reached by this mechanism.

## 3) Accountability

With the exception of the EU case, an **independent agency** or a Steering Committee representing different interests on biotechnology was responsible for managing the process according to the rules agreed upon. In the German case, all participants had the opportunity to publicly announce their assessment of the process at the final conference in the presence of the respective Minister. This can be considered as an additional instrument to create accountability. The most extensive mechanism was practiced in the UK case, where more than 70,000 **feed-back** forms were mailed, and more than half of them were returned. A problem with the EU initiative can be seen in the fact that it was the staff of the EU commission itself, which organized the consultation process. The possibilities of the participants to provide feed-back on the process were more limited than in the other cases.

In none of the cases was the policy dialogue an integral element of a legislative process. The **impact** on policies and regulations was mainly achieved by informing policy makers about the positions, opinions and concerns of different stakeholders and about the extent of agreement and disagreement in their positions. Therefore, apart from the policy makers, no institution was specifically accountable for the extent and way in which the results of the policy dialogues were used.

## 8.4 Social Dynamics

There is evidence that all processes considered here had at least the effect of **engaging different stakeholders in a direct dialogue**, who would not meet personally otherwise. In the large-scale exercise practiced in the UK, the dialogue certainly also had the effect to raise awareness of the topic and engage a larger number of ordinary citizens into the debate. It remains unclear, however, to which extent the processes analyzed here led to a greater appreciation of other opinions and to processes of social learning. The **prospects of achieving social learning and consensus** are certainly better, if the problem to be dealt with is locally confined and of recent origin. In the cases under consideration, social learning was hampered by the fact that biotechnology has been a heavily contested issue in most European countries for more

than a decade, and that rather broad policy solutions at the national and international level are required to deal with this technology. Against this background, it is not surprising that the initiatives discussed here focused more on documenting the points on which there is consensus rather than on extending this consensus.

### 8.5 Cost-Benefit Considerations

Assessing the potential benefits of GM technology and comparing it to the risks involved was an important consideration in all dialogue processes analyzed here. Little evidence could be found, however, on efforts to include **quantitative cost-benefit assessments** in the dialogues, e.g., concerning the costs incurred for the co-existence of GM and non-GM crops, or concerning different scenarios of regulating GM crops.

Unfortunately, published information on the **costs incurred for dialogues** themselves was only found for the UK Debate. Since this debate was by far the largest in scope, the respective figure can be considered as an upper boundary for such policy dialogue processes. As compared to the costs invested in the development of GM technology and its economic potentials and risks, it appears justified to argue that the costs of organizing stakeholder dialogues should not be considered as a major constraint, at least not in industrialized countries.

## 9 Lessons for the African Dialogues Initiative

“The African Policy Dialogues on Biotechnology” initiative aims at providing a regional platform, “through which African countries will be able to engage in dialogue and develop consensus on a common biotechnology strategy.” The goal of the platform is to “provide a structured regional process for a multi-stakeholder dialogue, consensus formation and development, and adoption of common policies and strategies on biotechnology” (IFPRI, 2004). Thus, the African initiative has two objectives: (1) to improve coordination and develop a common strategic vision among African countries concerning biotechnology, and (2) to use multi-stakeholder dialogues in the process of achieving this goal.

### 9.1 Considerations concerning the applicability of the European experience

The policy dialogues on biotechnology in Europe are characterized by a set of **specific factors** that have to be considered before deriving lessons for the African initiative: (1) the emergence of a culture of participatory technology assessment in several European countries since the 1980s; (2) the development of specific participatory methodologies such as citizen juries and consensus conferences; (3) the need to accommodate the concerns of an increasing environmental movement; (4) and efforts to address deficits in the institutions of representative democracy by a shift from technocratic and elitist policy making towards more open, participatory and deliberative processes, both at the national and at the European level.

These policy trends certainly did not solve the power struggles and conflicts surrounding biotechnology, and one should avoid using an “ideal world” as the reference scenario for assessing policy dialogue initiatives. As indicated above, there is considerable diversity in the political cultures of different European nations, which influence the extent to which **consensus-based versus conflictive strategies** are pursued. However, as documented by the Aarhus Convention, there is a broad

consensus that there is no alternative to participation and openness in policy-making if the challenges of sustainable development are to be met.

These trends, which have favored policy dialogues and consultation processes on biotechnology, are certainly **not confined to Europe**. Participation has long been a dominant paradigm in development policy. The shift to open, participatory policy processes is an essential element in the governance principles formulated by NEPAD. And finding solutions to contested questions by consensus-oriented discussion and deliberation has been an important element in many African cultures and traditions.

Other frame conditions are more **specific** to the European case. The integration of European countries in the European Union implies not only the need for a **harmonization of biotechnology** policies, but also the institutional infrastructure and the necessary resources to do so. In spite of the fact that there is an effort for the coordination of biotechnology strategies among African countries, as the NEPAD commitment to the initiative shows, it remains as yet unclear whether a harmonization of biotechnology policies is in the interest of the individual countries. African countries may well make best use of biotechnology by **adopting different strategies**, depending, for example, on the extent to which they export, or plan to export, agricultural commodities to European countries. Even in the European case, the degree of harmonization differs depending on the type of regulation. While decisions on the approval of new GM varieties are made jointly with a qualified majority at the EU level, the member states have considerable room for country-specific regulations concerning liability and co-existence so that they can consider their priorities and make use of their **comparative advantages**.

Another important difference between the African and the European context is the **availability of information from survey research** that can inform policy makers apart from stakeholder consultation processes. As indicated above, a large-scale representative survey called “Eurobarometer” is carried out every year in EU member states. Questions on biotechnology have been periodically included in this survey. Therefore, European policy makers and administrative officials are rather well informed on the perceptions and opinions of the public concerning biotechnology, their views on benefits and risks, their trust in regulatory bodies, and changes over time in these parameters. This information is important for assessing and cross-checking the information obtained by stakeholder consultation processes.

With regard to representation and legitimacy, policy dialogues at the European level can take advantage of the fact that many interest groups are organized at the European level, a process that has been promoted by European integration. These **umbrella organizations** at the European level often represent civil society organizations, such as labor unions, farmers’ organizations and environmental organizations, which have a long history and a large membership in the individual European countries. Thus, they constitute a “countervailing power” to concentrated business interests and certainly facilitate achievement of legitimacy in stakeholder dialogue processes at the European level. While the history and degree of civil society activity differs among African countries, a similar degree of coordination at the supra-national level is not to be expected. Moreover, the question of stakeholder involvement in the African case is complicated by considerable **donor influence**. While the donor provision of funds may be conducive for stimulating civil society organization and promoting democracy, donor funds are typically associated with explicit or implicit donor interests. Since biotechnology is characterized by a far-reaching polarization between

North America and Europe, the role of donor influence and its implications for the legitimacy of stakeholder policy dialogues constitutes a challenge to be addressed.

An advantage in case of the African policy dialogue initiative can be seen in the fact that the topic has *not* yet been characterized by many years of heated **conflict**, as is the case in Europe. Therefore, the possibilities to engage stakeholders in a process of social learning and deliberative solution generation are certainly better than in the European case.

## **9.2 Recommendations**

### **1) Pay attention to the legitimacy challenge**

The experience of biotechnology policy in Europe shows that it is useful to establish consensus-oriented stakeholder participation processes in rather early phases of the policy process, and to pay particular attention to the challenge of creating legitimacy for this process. If the process is viewed as a “token participation” exercise to legitimize predefined interests, it will fail to contribute to the degree of societal consent required to make best use of the benefits biotechnology may offer for African countries.

### **2) Engage stakeholder organizations in a structured ongoing discourse**

Three major methodologies for stakeholder involvement were observed in the European cases: (1) discussion processes involving the representatives of stakeholder organizations and experts in an ongoing structured process, (2) the invitation of contributions and comments from stakeholders, experts and individuals through internet-based platforms, and (3) the creation of policy documents based on deliberation processes of ordinary citizens, who have been informed by experts. With regard to the legitimacy challenge, we recommend to rely mainly on the first approach, to use the second mechanism as an additional tool, and to conduct research on the third approach. The European experience shows that the legitimacy of citizen panels largely depends on political culture. In countries without a tradition in using this approach, the recommendations of citizen panels are easily considered as not representative and subject to interest capture. Therefore, more research is required to determine to which extent this approach could work in African contexts. The problem with the second approach, contributions made in Internet platforms, is the self-selection mechanism, which may lead to the exclusion of stakeholders that have less access to Internet technology, and less resources to engage in such a process. As explained below, we recommend using this approach as an additional tool to improve transparency.

### **3) Make efforts to have all stakeholder interests represented**

If a dialogue process focusing on stakeholder organizations is used as major participation mechanism, as recommended above, particular emphasis has to be placed on having **all relevant interests** represented. Otherwise, this approach will not enjoy legitimacy either. As discussed above, important interests may not be well organized in the African context, especially not at the supra-national level. Especially **poor and disadvantaged groups**, both on the consumer and on the producer side, may not have membership organizations, neither at the national nor at the international level. Moreover, some interests may be well organized in some African countries, but not in others. This may also lead to a bias, if they are to be included in a supra-national dialogue process. Efforts should be made to identify organizations, for

example faith-based organizations or poverty-oriented NGOs, which are able to credibly represent the interests of poor and disadvantaged groups in the discourse process. It is also recommended to analyze the influence of donor organizations and their interests on the discourse process.

#### **4) Establish rules in the beginning that are agreed upon by all participants**

The European experience shows that it is essential to establish **clear rules of fairness** and conduct at the beginning of the process. The rules have to be agreed upon by all the participants. They should help to avoid – as far as possible - that the power relations existing outside the discourse arena hamper the discourse process. The rules of “rational discourse” shown in Table 1, and the rules applied for the German dialogue presented in Box 1, may serve as an inspiration. However, it is essential that the participants in the African policy dialogues develop their own rules that fit into the African **cultural context**.

#### **5) Value different types of knowledge**

In all European policy dialogue cases considered here, **scientific knowledge** played an important role. Researchers and experts from a wide range of disciplines informed the policy dialogues in different ways, such as submitting texts and holding presentations. The experts consulted included agronomists, biologists, ecologists, agricultural economists, rural sociologists, political scientists and legal scholars. For the African case, we also recommend to include the knowledge generated by a variety of **different disciplines** in the dialogue processes.

What the European experience, however, clearly shows is that scientific and expert knowledge alone does not constitute a sufficient basis for policy choices on technologies that involve risk and ethical concerns. The far-reaching societal conflicts on biotechnology experienced in Europe have much to do with the fact that the public lost its trust in traditional policy making, which relies only on expert advice and takes place in rather closed policy circles (see above). Therefore, it is useful to integrate **different types of knowledge** in the policy dialogue processes, including the knowledge of different stakeholder organizations. In the African context, the inclusion of local and indigenous knowledge deserves special consideration.

#### **6) Promote transparency**

The European examples analyzed here are characterized by far-reaching efforts to create transparency, using a variety of strategies. **Internet platforms** and e-mail newsletters were most important, but other options, such as press releases and printed information played a role, as well. Based on this experience, we recommend creating opportunities for citizens to inform themselves about the policy dialogue processes, for example through press releases and an e-mail newsletter. A further step in increasing transparency is to invite suggestions and comments from the public. This strategy can help to detect an “interest capture” of the dialogue process. If contributions are invited, it is, however, necessary to analyze them, include them in a systematic way in the dialogue process, and to provide some feedback.

#### **7) Promote policy dialogues and research at the national and sub-national level**

One can also derive from the European experience that it is useful to promote policy dialogues at the national and sub-national level, which help to better inform the coordination process at the supra-national level. Dialogues at the national and sub-national level provide more scope for using approaches that are tailored to the **specific**

**cultural context.** As indicated above, research is also recommended on using citizen panels (e.g. consensus conference model) and on the possibilities to achieve legitimacy with this approach. In support of policy dialogue processes at the supra-national level, it will also be useful to conduct more research on the potentials and risks of biotechnology applications in the different countries. This will help to identify their **comparative advantages for different types of regulatory approaches.**

The authors hope that the insights from Europe will contribute to identifying policy dialogue processes that will allow African societies to use the potential benefits of biotechnology in accordance with their interests and values.

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**Table A: Overview of the Policy Dialogue Processes**

Country	France	Germany	Switzerland	UK	EU
Name of the process (translated)	<b>Debate on GMOs and Field Trials</b>	<b>Discourse Green Genetic technology</b>	<b>PubliForum Genetic Technology and Nutrition</b>	<b>GM Nation? The Public Debate</b>	<b>Public Consultation “Towards a Strategic Vision of Life Sciences and Biotechnology”</b>
<b>Organisation of the Dialogue</b>					
Institution organizing the dialogue	Special Committee by request of the Ministry of Agriculture	Steering Committee and consultancy, by request of the Ministry for Consumer Protection, Nutrition and Agriculture	Swiss Science Council’s Technology Assessment Program	“Steering Board” (mixed committee) by request of Secretary of State for the Environment, Food and Rural Affairs.	Commission of the European Communities
Place, date and duration	Workshops on Feb. 4-5, 2002 at the Economic and Social Council (Paris); in addition, internet contributions	December 2001 – September 2002; Meetings held in different locations	2 preparatory weekends: 27/28.03.99 and 8/9.05.99 Publiforum: 4-7.06.99 (Bern)	Workshops: November 2002 Discussion groups: June.2003 (6 weeks)	04.09. to 23.11. 2001
Role of the dialogue	To identify elements for analysis To provide recommendations for the Ministry	To inform the Ministry about the positions of stakeholders in view of the pending legislation process; To promote interaction and dialogues between stakeholders	To mediate between stakeholders for achieving mutual understanding To identify the public’s view and recommendations about GMOs	To take into consideration people’s opinions before a potential change in public policy	Stakeholder consultation held for the preparation of a Biotechnology Strategy and Action Plan for European Union

**Table A continued**

Country	France	Germany	Switzerland	UK	EU
Methodology	Participation/consultation via Internet and during a two-day workshop with six moderated round tables	Introductory phase with agreement on rules and topics; Discourse phase with international conference, five moderated discussion rounds and a final workshop	“Concensus-conference” model developed in Denmark; A citizen panel prepares a report after information by experts and intensive deliberation.	Selection of issues in 8 discussion foundation workshops attended by lay persons and one workshop attended by stakeholders. Debate: Tier 1: 6 national and regional workshops; Tier 2: 40 county level workshops; Tier 3: 629 local level workshops, by local organizers using a toolkit “Narrow-but-deep element”: regular discussion groups of citizens (as cross-check for the open debate) Website contributions; feed-back forms	Contributions to a policy paper (published on a webpage) via post, fax or e-mail; Two-days stakeholder conference with workshops, addressed by invited speakers
Participants	36 experts 230 representatives of interest groups 120 ordinary citizens	Representatives of 30 stakeholder organisations, including the organisations of the industry, farmers, labour unions, consumers, environmentalists, and churches; Representatives of different Ministries as observers; 53 experts in different fields	15 members of an “accompanying group”, representing stakeholder organizations (watchdog) 28 members of the citizen panel (main protagonists; representing the diversity of the population) 17 “reference persons” (experts, stakeholder representatives) who answer questions of the citizen panel	Participants in foundation discussion workshops: approx. 180 Total estimated participants in debate workshops at the three levels: approx: 20,000 persons Total contributions by post or e-mail 1,200 Total feedback forms from the general public on the GMOs and on the debate: 36,557; Associated events	320 contributions (made 117 “Private citizens”, 79 academics 60 NGOs, 41 biotechnology groups, 9 public organizations, 7 farming organizations and 3 consultants) Stakeholder conference attended by 320 persons (experts, stakeholder organizations, policy makers)
Type of final document	Final report	Final report prepared by the consultancy in charge	Final report	Final report; presenting a qualitative analysis, with detailed annexes	Commission Staff Working Paper, Brussels, 2002.

**Table A continued**

Country	France	Germany	Switzerland	UK	EU
Resources spent	Not available	Not available	Not available	Debate: £ 511,500 Support: £ 138,400 (Ministry of Agriculture)	Not available
<b>Issues covered</b>					
Topics covered	6 broad topics; 3 topics on field trials (necessity, results, control); 3 topics on genetically modified food (health and environment; socio-economic impact; democratic regulation)	5 broad topics: Biodiversity, innovation potential, benefits and risks, consequences of not using GMOs, information, transparency and freedom of choice)	6 broad topics: Research, Ecosystem, Health, Ethics, Business and industry, Legislation and legal compliance	13 major topics identified during the discussion foundation workshops, covering possible costs and benefits of GMOs, consumer choice, health, environment, ethical issues, and implications for developing countries.	Contributions covered a wide range of topics: benefits and risks, food safety, environmental issues, ethical questions, regulation and harmonization, trade policy, support to developing countries, patenting life. Stakeholder conference covered four topics: Potential and research, innovation and competitiveness, regulation and governance, public perception and ethical implications
Selection of topics	Proposed by the Ministry and specified by the Steering Committee	Selected by the Steering Committee, which was elected by participants	Topics identified by accompanying group; specific questions by the Citizen panel	Topics were selected in the foundation discussion workshops; according to the principle that the public should frame the discussion.	General information was provided and the most commonly expressed ideas were chosen for the report on the contributions; Topics for stakeholder conference were proposed by Commission.
Input provided	3 documents on the internet: Report by Ministry of Agric. Report Commission of Bimolecular Engineering Minutes by AFSSA	Basic reader which was updated during the process; all participants could submit contributions	Information sheets Brochures, newspapers, books.. magazines Lectures during preparatory weekends	Short video Summary of views about GMO's (for and against) Different documents	Policy document published on the internet in 11 languages, covering the main issues, raising the questions and asking for comments and opinions

**Table A continued**

<b>Country</b>	<b>France</b>	<b>Germany</b>	<b>Switzerland</b>	<b>UK</b>	<b>EU</b>
Procedures for discussion	Internet contributions; Round tables with 2 moderators	Round table discussions; metaplan technique used to identify points of consensus, disagreement and open questions	One moderator; reference person had 10 minutes to answer panel's questions, discussion of panel members	Round table discussion based on debate stimulus material (including a film); usual format (formal speakers, voting) was avoided. In the "Narrow-but-deep" element, citizen groups dealt with the topic over a period of time.	Collection of contributions and analysis of responses without interaction; Discussions during the Stakeholder Conference
Way in which final document deals with conflicting positions	For each topic: Arguments pro and contra and consensus points were presented.	Final report approved by the Steering Committee; for each topic, points of agreement, disagreement and open questions were presented.	For each question: Report presented the panel's summary of the reference person's answer, the panel's opinion, and the panel's recommendations.	Report describes general and specific arguments for GMOs and against GMOs in separate sections..	Report on analysis of contributions divided them according to points of consensus, points of debate, and points of conflict. Report on stakeholder conference presents assessment of rapporteurs on consensual and contentious issues
Impact on relationship between stakeholders	Clear differentiation in opinions, lower participation of experts than expected	Establishment of direct contact for more future interaction was acknowledged;	Intensive deliberation among the citizen panel members; impact on stakeholder organisations relations not intended by this method	No specific information available, but due to its scope, debate has certainly created awareness and improved direct contacts between stakeholders	No information on available; Stakeholder Conference in Brussels may have helped to establish direct contacts
<b>Impact of the Dialogue</b>					
Use of the outcome	Information of the Ministry (no specific information available)	Information of Ministry and Parliamentarians, who referred to the discourse during Parliamentary debates on the new GM law	Information of the Parliament and provision of recommendations on GMO's	Information of the British government about the public's opinion concerning GMO's	Contributions considered by the Commission in preparing the policy document "Life Sciences and Biotechnology. A Strategy for Europe"

**Table A continued**

Country	France	Germany	Switzerland	UK	EU
Dissemination strategy	Publication of the results via Internet	Final conference with press coverage, press releases, publication of all documents on a special website	Report presented in different commissions from the Parliament. Film was produced to document the forum. Publication of articles in press and internet. Dissemination of report to NGO's	Printed documents, CD-Roms and publication on the internet.	Publications of results via Internet and through the information channels of the EU institutions.
Organizers' assessment	Conference displayed confrontation and the need for providing more information to the public	Minister acknowledged usefulness of the discourse (e.g., information on unexpected points of consensus)	Organizers explained satisfaction with the good results obtained and the public's participation and the high commitment of the panel	Organizers used four criteria and: Extent of public awareness, views of the participants about the debate and organization, views of informed commentators – about the organization, credibility, transparency, and ability to present in the report document the public views and to make them clear to the decision makers; Debate was generally judged as successful	Organisers acknowledged contributions and participation in Conference; concern about low number of contributions from some EU countries (Southern Europe)
Participants' assessment	Some criticism: ideas and discussions were pre-defined and prepared	Mixed assessment: Proponents of biotechnology criticized that no consensus could be reached on essential questions	No information available.	Possibility for broad participation was appreciated after some initial concern whether the government would hear the people's voice.	No information available

**Table A continued**

Country	France	Germany	Switzerland	UK	EU
Change in positions as result of dialogue	No evidence available	Report of results and assessment statements by participants indicate that no change in positions was achieved.	Citizens may have changed their perceptions during the deliberation process (method designed for social learning); however effects not documented	Report distinguished different types of participants; those strongly against or in favour, and those wishing to form an opinion. For the latter group, the process provided scope for change of opinion.	No information available, but process did not provide scope for this (consultation rather than dialogue)

Sources: Reports and documents on each process, see reference list.

**Webpages:**

France: <http://www.ladocumentationfrancaise.fr/brp/notices/024000118.shtml>

Germany: <http://www.transgen.de/diskurs>

Switzerland: [http://sciencescitoyennes.org/IMG/pdf/fsc\\_OGM200310.pdf](http://sciencescitoyennes.org/IMG/pdf/fsc_OGM200310.pdf)

UK: <http://www.gmnation.org.uk/>

EU: <http://europa.eu.int/comm/biotechnology/>