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Public Participation and Better Environmental Decisions

The Promise and Limits of Participatory Processes for the Quality of Environmentally Related Decision-making

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Chapter 1
Introduction

Frans Coenen

1.1 Public Participation in Environmental Decision-Making

This volume is on the effectiveness of public participation in environmental decision-making. Participation practices are used in many different contexts, and this book relates participation to the context of environmental decision-making. We have interpreted environmental decision-making quite broadly. All types of decisions that have serious environmental implications and that tend to be facilitated by environmental law, or are perceived by citizens as mainly revolving around environmental issues, are included in this volume.

Principle 10 of the Rio Declaration 1992 articulates participation in environmental decision-making as one of the key principles of environmental governance.[1] This principle is developed in the Aarhus Convention (1998) that includes improving public participation in decisions relating to the environment as one of its three key pillars.[2] The importance of public participation for environmental decision-making and sustainable development is recognised by many international organisations (e.g. OAS, 2001; OECD, 2001; EU, 2002a, b; UN, 2002[3]) and national, regional, and local authorities.

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[1] Principle 10 of the Rio Declaration states that environmental issues are best handled with the participation of all concerned citizens at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information available.

[2] The Aarhus Convention comprises three key pillars. Besides improving public participation in decisions relating to the environment these are securing effective access to environmental information and ensuring that there is a review procedure for any decisions, acts, or omissions under the convention or in relation to other national environmental law.

[3] *Paragraph 128 of the World Summit on Sustainable Development Plan of Implementation, 2002* Ensure access, at the national level, to environmental information and judicial and administrative proceedings in environmental matters, as well as public participation in decision-making, so as to further principle 10 of the Rio Declaration on Environment and Development, taking into full account principles 5, 7 and 11 of the Declaration.

F.H.J.M. Coenen (ed.), *Public Participation and Better Environmental Decisions*,

Many of the arguments for public participation in these policy documents are functional, that is to say they see public participation as a means to an end. A functional or instrumental perspective, with an emphasis on pragmatic usage, can be distinguished from a normative perspective with an emphasis on democratic and emancipatory values. Whereas much of the literature stresses the normative democratic and participation-related arguments surrounding participatory decision-making, policy practitioners tend to take an instrumental position and stress efficiency and effectiveness.

The functional arguments for public participation in environmental decision-making contained in the policy documents mentioned above can generally be placed in one of three categories:

- Participation will increase the legitimacy of decisions taken and reduce the level of conflict.
- Participation will contribute to the quality of decision-making because it will give the government the information necessary for decision-making and contribute to the systematic identification of problems and their causes, and to the consideration and assessment of alternative strategic options.
- Through participation, people will learn of the environmental problems that society faces and change their behaviour.

In instrumental terms, these documents assume that a participatory decision-making process has some potentially considerable advantages over alternative non-participatory decision-making processes. In this volume, we focus on these functional advantages for a government. This, however, does not mean that we are only advocating a pragmatic usage of public participation: functional arguments for public participation are closely related to normative arguments. For instance, in many calls from a government's perspective for functional participation, there is an implicit assumption that the engagement of the public in decision-making processes for environmental protection will increase awareness and will ultimately result in behavioural change by the participants. Thus, the normative argument for people to participate, and so learn about the problems society faces, can at the same time be seen as a functional argument from a government perspective, in order to gain implementation support.

The functional advantages are the specific *promises* that participation holds. The key promise of participation that we are interested in here is that participation leads to better decisions. There is already literature on public participation that documents how participation has impacted on effective environmental decision-making and which discusses circumstances in which public participation enhances the quality of environmental decision-making (e.g. Beierle, 2000; Beierle & Cayford, 2002; Chess & Purcell, 1999; Coenen, Huitema, & O'Toole, 1998; Pound, Snapp, McDougall, & Braun, 2003) but there is also disagreement in the literature and in policy practice as to whether participation leads to better decisions (Yosie & Herbst, 1998).

Here we will argue that any assessment of the relationship between the use of a participatory approach in a decision-making process and the results it yields, in terms of better decisions, depends on (1) the way one sees the quality of decisions, (2) the purpose with which participation is undertaken, and (3) the organisational set-up and

its limitations. The main question to which we are seeking answers is: *what limits and what enables information in public participation to lead to better decisions* ?

This chapter outlines the issues addressed in the succeeding contributions. To deal with our main question three issues have to be clarified:

1. What constitutes better decisions and what is the quality of a decision?
2. What form of participation are we talking about, and with what type of function or purpose?
3. How does participation relate to the quality of the decision outcome, in particular what is the mechanism for processing the public's input to the decision?

We use the umbrella term 'public participation' here to encompass citizen, stakeholder, and community participation. 'Public participation' covers a broad range of interactions between government and civil society to design, implement, and evaluate policies (compare Renn, Webler, & Wiedemann, 1995). This is narrower than political participation, since the latter includes all activities by citizens and stakeholders that influence government decision-making such as voting and lobbying.

Participants, as perceived in this volume, can be both individual and collective actors. Individuals can be affected and/or involved laypeople, or citizens that are spokespeople or advocates of affected unorganised interests such as neighbourhoods. Stakeholders we can define as: "socially organised groups that are or perceive themselves as being affected by a decision" (Renn, Webler, Rakel, Dienel, & Johnson, 1993: 190). Stakeholders defined in this way encompass communities that can range from geographically defined ones to population and risk groups.

Stakeholders can be collective actors such as neighbourhood initiatives, social movements, or local network enterprises that are composite actors whose purposes "are dependent on and guided by the preferences of their members" (Scharpf, 1997: 54). Or they can be incorporate actors such as unions, chambers of commerce, employer organisations, who are composite actors with a high degree of autonomy in defining their purposes from the participating actors. Collective actors are often represented by individuals linked to the collective actor.

1.2 The Quality of Decisions

In order to assess the quality of decisions one has to ascertain the degree to which the decisions meet certain *criteria*. The criteria for what we see as a 'good' decision depends on underlying assumptions about what is a good decision in relation to participation. Broadly speaking, one can place the emphasis on participation as a means to create decisions that are fair, or stress that participation should lead to more competent decisions (Dietz, 2003; Webler, 1995).

Fairness is connected to the idea of equity: does everyone have a fair say in the decision-making process, is equal access guaranteed, and are the outcomes distributed equitably? *Competence* relates to the use of information that is available at the time the decision is made.

Here, we operationalise a competent decision as one that does not ignore relevant information that is in the possession of certain groups. Coenen et al. (1998) emphasise the link between the participatory content of certain decision-making processes and the rationality of their outcomes by stressing competent decisions. In this way, they connected the operationalisation of competent decisions to the prominent debate about rational decision-making among academics such as Dror (1964), Etzioni (1967), Lindblom (1959), and Simon (1957). They accepted Faludi's (1986, 1987) interpretation of rational decision-making as a rule for testing decisions, rather than as a prescription for how to act in reality. Faludi has argued that rationality is not an objective criterion of quality but a subjective one relative to the definition of the decision situation. A decision is rational if it is the best of all the possible alternatives, taking into account all their consequences weighed in the light of a set of values that includes, where relevant, equity. All alternative actions and their consequences have to be assessed within the definition of the decision situation. This decision situation can be compared with a verdict in court. In justifying a decision the question is: was it reasonable for the planner/defendant to know what they were doing, to be expected to find out, and so forth. Decision-making improves in quality as additional relevant information is considered, in particular information distributed across many groups (Coenen, Huitema, & O'Toole, 1998). A decision should not ignore relevant information that is held by certain groups.

In this volume we are interested in the relationship between participation and competent decisions. However, what one sees as a competent decision to an extent depends on one's perspective on the nature of public participation. The idea that competent decisions require all the relevant information in the possession of certain groups to be included still leaves room for different perspectives on:

1. How to define and pursue preferences in a policy-making process towards a public or common good
2. The division of roles between government and governed in decision-making
3. Epistemological questions on how to achieve knowledge

A *managerial* perspective entrusts elected representatives, and their appointed administrators, with identifying and pursuing the common good (Laird, 1993: 343). Whilst knowledge of public preferences is vital to a managerial approach, the direct involvement of the public in decision-making is seen as a threat to the common good because it opens the door to self-interested strategic behaviour. The *managerial* perspective essentially views decision-making as problem solving. A certain, objectively definable, problem exists and a decision maker must select the best response, based on criteria or values that can be determined ex ante politically. This approach is essentially a modernist scientific method, with an emphasis on science, knowledge, and objectivity. Participation by 'laypeople' is not necessary, and should be limited to no more than the political process that defines the goals to be attained by the 'scientists'.

A *pluralist* perspective views government, not as a manager of the public will, but as an arbitrator among the various organised interest groups. In pluralism, there is no objective 'common good' but a relative common good arising out of

the free deliberation and negotiation among organised interest groups (Williams & Matheny, 1995). The *pluralist approach* views decision-making as a problem of formulating the public interest. The pluralist approach essentially assumes that decision-making is a matter of balancing competing interests by an independent third party (Williams & Matheny). The competing interests are assumed to be mutually exclusive. The only way to obtain 'correct' decisions, according to this perspective, is to ensure a due process that allows all involved a chance to have their say, and then weigh up the various interests. As an initial stage, the representatives of specific interests are expected to independently resolve the issues that affect them since they are considered to best know their own interests; the emphasis is then on the information these parties bring to the negotiating table. The assumption is that there is no such thing as a 'right' solution to a problem – rather, different interests should be carefully aggregated and balanced. Aggregation can take place either through the market, or through a third party deciding for the parties.

In the *argumentative appr oach*, decision-making is a problem of finding a shared understanding of problems. It stresses the fact that people may develop a shared understanding of their common interest through deliberative processes. In particular, a community is seen in this perspective as a basis for processes where people get to know each other, interact on a daily basis, and learn to appreciate others' points of view. This approach stresses dialogue and information from the community members as necessary for a good solution.

In the three approaches outlined above one can identify several philosophical bases for judging the quality of decisions. The *managerial discourse* attaches great value to the discovery of the objectively 'right' decision. The discovery of this should be placed in the hands of experts for two reasons. Firstly, they are the ones who can understand the technically complex issues at hand. Secondly, they are the ones who can be expected to consider the common good, whereas others would be expected to pursue their own interests. Thus, expert decision-making processes should be isolated, as far as possible, from interest-group pressure and citizen participation.

The *pluralist* perspective rejects the idea of an objectively definable right decision, and considers the procedural conditions under which decision-making takes place to be crucial. Due process, which implies unrestricted access to the decision arena by all affected parties, brings just decisions.

The *argumentative* perspective also rejects the concept of an objectively definable right decision, but replaces it with dialogue rather than the aggregation of interests. Through developing a shared understanding of their common interests, in deliberative processes, community members are supposed to find good solutions through consensus.

We see the adoption of specific approaches to participation and decision-making as expressions of the underlying assumptions concerning institutional arrangements: particularly the role of government, the allowed level of participation, and the expected influence on decision-making.

Each perspective favours a different form of participation. The managerial perspective may favour a survey whereas the pluralist perspective favours stakeholder mediation, and the argumentative perspective will favour a method such

as citizen advisory groups. In Section 1.3, we will discuss the various functions and motives in public participation. The ideological or philosophical basis, based on these functions, can be translated into the underlying assumptions supporting specific participation processes and so answer the question as to which decisions are qualitatively better than others. In Section 1.4, we will link the various perspectives and motives to different forms of participation.

1.3 The Instrumental Functions of Public Participation

The instrumental perspective stresses the functional role of participation as an instrumental tool. We are interested here in the function of public participation in improving decisions. A difficulty with the instrumental function of participation is that it can be functional for quite different reasons for politicians, for administrators, for stakeholders, for citizens, and for experts. Further, there can be differences in how they view 'better decisions'.

We have operationalised a decision as being better if all the alternative actions and their consequences have been assessed within the definition of the decision situation. The definition of decision situation is linked to the quality criterion of competence, which relates to the use of the information that is available at the time the decision is made. A competent decision is one that does not ignore relevant information in the possession of certain groups.

In this section, we will argue that achieving better decisions, through the instrumental function of public participation, requires involving people in the identification of needs, in the analysis of problems, in planning, and in taking action. In essence, decisions become more creative through using ideas and knowledge from the public, or more responsive and more appropriate to the needs and wishes of the public.

From the instrumental perspective, there are two lines of reasoning for the instrumental involvement of the public in environmental decision-making. In the first place, finding and implementing sound solutions to environmental problems may necessarily require continuing and broadened participation far beyond the 'usual' experts and political elites. This demands knowledge be added by the public to the decision process, including contributing to analyses and the assessment of alternatives. Secondly, environmental decision-making often requires a shift of resources and opportunities from some groups to others, thus raising inherently political questions. Consequently, a decision is seen as better if it builds on increased public support and the decision leaves less potential for conflict. Neglecting information from the public leads to legitimacy questions and potential conflicts.

If one sees a decision as better if all the alternative actions and their consequences have been assessed within the definition of the decision situation, in other words that the decision does not ignore relevant information in the possession of certain groups, then public participation can be instrumental in all phases of

the decision-making process. In terms of decision-making from an instrumental perspective, public participation will improve:

- The information available for the decisions (such as a broader range of alternatives, or a view from the public on the consequences)
- The assessment of the alternatives (additional monitoring, appraisal, and judgement by the participants)
- The potential for action and implementation (through support-building and conflict reduction)

In instrumental terms, participatory decision-making processes potentially have some considerable advantages over other decision-making processes. The instrumental arguments for public participation stress efficiency and effectiveness criteria. Public participation may provide, at least, a partial cure for problems in non-participatory processes. Examples of such problems are that policymakers inadequately consider public values and preferences, innovative solutions go unexplored, and policy implementation is confronted with public mistrust or even a culture of conflict (Beierle, 1998).

There is a perceived downside to enhancing the analysis, judgement, and potential for action and implementation in terms of the cost-effectiveness of the decision-making process. From a government perspective, complaints against participatory decision-making are often that it leads to time delays, that there is a bias towards certain vested interests and therefore information is incomplete or distorted, and that there is the problem that the public does not have sufficient knowledge to participate usefully in decision-making. Participation as a panacea for governmental problems is opposed by some citizens. From the public's perspective there are normative objections, such as the non-representative input to decision-making, but also very instrumental objections, such as the costs of participating and the difficulty in protecting one's own interests.

The promise that public participation apparently holds for the quality of decision-making has to be weighed against the limitations of public participation in terms of the quality of decision-making and the interests of citizens. This volume addresses these limitations in relation to the typical efficiency arguments formulated above and argues that:

1. Public participation raises the substantive quality of the decision itself: by adding information to the decision-making process in a way that incorporates relevant knowledge (such as good ideas and lay expertise by participants).
2. Public participation can add to the quality of the analysis: by engaging participants in the assessment and monitoring of alternatives.
3. Public participation will broaden public support for environment-related decisions and this will lead to a time gain (shorter decision-making processes in the longer term) and co-implementation.
4. Reducing the level of conflict will facilitate action and implementation.

In the Table 1.1 the different arguments and motives for public participation are summarised.

Table 1.1 Arguments and motives for public participation (see also Coenen, Van de Peppel, & Woltjer, 2001)

Normative arguments		Instrumental arguments	
For government	For participants	For government authority	For participants
Functioning of democracy	Emancipation, particularly of certain groups	Additional source of ideas and information	Protection of stakeholders' interests
Creating 'shared responsibility' in, and legitimacy of, environment-related decisions	Empowerment and learning about the environmental problems facing society	Monitoring and appraisal by participants	
		Broadening of public support for environment-related decisions	
		Reducing the level of conflict	

1.4 Institutional Arrangements and Participation Rules

1.4.1 Participation Rules

The institutionalisation of participatory rights, and the way they are practised, provides opportunities for the public to exert influence. There is a direct link with the aforementioned function of participation. The balance between arguments of efficiency and of democracy can result in the influence in practice being shallower and broader than suggested by the formal rules. If a law gives the public the right to participate in a planning decision-making process, the outcome depends on how the duties of the public authority are described in the law. Those in charge of information, willingly or otherwise, can over communicate some parts of the information, while neglecting to communicate other parts.

Participation processes can be viewed as formal decision processes where outcomes are dependent on the acts of more than a single individual. The solving of environmental problems is essentially a collective action problem. Participation processes will be constituted or regulated by rules that arrange the content, participants, information flows, decision mechanisms, etc. in a particular participation process.

Here we follow Denters and Klok who adopted, for their interpretation of *democratic institutions of local go vernance*, Rothstein's interpretation of the rule concept (Coenen, Denters, & Klok, 2006; Denters & Klok, 2006; Klok & Denters, 2004). Rothstein (1996: 146) proposed including all political rules within the definition. Political rules are all rules that 'have been established by either an explicit or tacit agreement […] whether or not they have been written down and decided upon in a formal procedure'. This includes what Ostrom, Schroeder,

and Wynne (1993) refer to as formal and informal rules but, however, explicitly excludes cultural and social norms from the definition.

Several authors have used elements of the neo-institutionalist rule typology developed by Elinor Ostrom to define such participation rules (e.g. Coenen et al., 2006; Denters & Klok, 2006; Huitema, 1998, 2002; Klok & Denters, 2004). These approaches build on the idea from Ostrom that in analysing decision processes one can look at various types of rules. Rules are defined as linguistic entities that prescribe what behaviours are required, prohibited, or allowed (Ostrom, 1986). Participation processes will be constituted or regulated by such rules. Since participation in decision-making processes is likely to be structured by formal and informal rules that will largely determine how much participation is actually possible, an institutional perspective is a useful way of describing the participation variable. For instance, Klok and Denters (2006) define:

- *Position-rules* that prescribe the positions to be distinguished in a particular participation arena: such as councillor, citizen, neighbourhood representative.
- *Boundary rules* that prescribe how the various positions in an arena become occupied.
- *Authority rules* that prescribe the allocation of rights and obligations for each position. These rules determine the means available to a position holder in performing his duties, and define the legitimate behavioural alternatives that are open to an actor in a position.
- *Scope rules* that prescribe the possible outcomes of an interaction in a particular arena. On the one hand, these reflect the limits to the content of the outcome of the arena, on the other, the scope rules specify the status of the outcome of the (sub)arena in relation to the other (sub)arenas of the entire *process*.
- *Aggregation rules* that prescribe how collective decisions and other outcomes in an arena are made on the basis of the contributions of the various position holders.
- *Information rules* that prescribe which information is available to each position holder; thereby prescribing how the various incumbents should relate to one another in terms of providing and granting access to information.
- *Pay-off rules* are prescriptions regarding the costs and benefits of the participation process, the costs and benefits that are part of an outcome, including in terms of the consequences of decisions.

For our purpose, answering the question *what limits and what enables information in public participation to lead to better decisions* , some of these rules are central. We have defined a decision as being better if all the alternative actions and their consequences have been assessed within the definition of the decision situation, implying that the decision does not ignore any relevant information in the possession of certain groups. The institutional arrangements that are of particular interest are then:

- What is the participation process about? (*scope rules*)
- Who can participate and why? (*boundary rules*)

- How is information generated in the participation process, and who has access to this information? For instance:
  - Do the participants have the authority to put forward proposals? (*authority rules*)
  - Are the participants offered free access to the information that is necessary to make the decision? (*information rules*)
  - What kind of information channels do the participants have to influence the decision, and under what conditions are they open or closed? (*information rules*)
- What is the mechanism for processing the public's input? For instance:
  - Which positions are taken? (*position rules*)
  - What actions can they take? (*authority rules*)
  - How is the public's information processed? (*information rules*)
  - How are actions ordered, processed, and terminated? (*aggregation rules*)

1.4.2 Limitations in Institutional Arrangements and Effective Decision-Making

Defining which types of rules may be relevant in describing participation processes but is not sufficient to link the institutional arrangements of participation with effective decision-making. The ambition of this book is not to measure the extent to which participation is allowed by these rules, but to elaborate *what limits and what enables information in public participation to lead to better decisions* .

The question as to which type of participation leads to effective participation is often linked to the degree or level of citizen participation. To describe degrees of citizen participation, so-called 'ladders of participation' are often used (Arnstein, 1969). The idea behind the ladder is that as one moves up the rungs, the participation becomes more meaningful or 'real' (Coenen, Huitema & Hofman, 1998). For our purpose, *linking institutional participation arrangements with effective decision-making*, these types of ladders provide two problems. Firstly, such ladders exclude those forms of participation in which citizens have no decision-making power. In this respect, the ladder confuses the process of participation with a specific element of the outcomes of the decision-making process, and therefore possibly underestimates the importance of mechanisms, such as consultation, that may in fact result in a strong citizen influence on the outcomes. This influence depends on what decision makers do with the information they gain from the consultation process. Although citizens may not have authoritative decision-making power, the 'real' decision makers could be convinced of the correctness of citizens' positions, on the basis of reasoning, and this may persuade them to make an 'improved' (or possibly a worse) decision.

The degree of participation is not only a matter of authority; it also depends on other institutional rules as discussed in the previous section, in particular:

- Decision-making rules, for instance can the public only choose from a limited number of alternatives? (*aggregation rules*)

– Information, for instance does the public have independent sources of information? (*information rules*)
– Access to the decision-making arena, for instance how broadly has the term 'citizens' been defined? (*boundary rules*)

From our perspective, limitations in the institutional arrangements for both participants and organisers of participation are a particular way of looking at the problem of effective participation. While the Arnstein type of ladder concentrates on performance constraints to public involvement, there is a second, additional, relevant type of ladder that starts from the perspective of individuals aspiring to participate in decision-making activities. This type of ladder is concerned with hierarchies of political involvement, with ranking from limited to greater political involvement (Almond & Verba, 1963; Milbrath, 1965). The institutional participation arrangements shape: (1) the role of government, (2) the allowed level of participation, and (3) the expected influence on decision-making. The opportunities for participation are largely dictated by the mode of decision-making. The influence of participation on a decision depends both on the participation practice as tolerated by the decision-making institute and on the degree of involvement accepted by the participants. Our characterisation of the allowed level of participation is therefore a combination of an Arnstein type of ladder, based on the status of the participant and the associated effectiveness of particular rungs on a 'participation ladder', and a form of hierarchy of political involvement (see Milbrath). For our purposes we make use of a simple two-sided 'participation ladder' (compare Brager & Specht, 1973) (Table 1.2).

A high level of allowed participation does not necessarily mean that participants actually participate. Participation can be hindered by certain limitations on the part of participants.

Participation is *demanding* for citizens and stakeholders: in terms of knowledge, capability, time, and resources. Firstly, there are information requirements: to have an opinion, people need experience with the matter concerned and also some circumstantial information. Secondly, participants need a certain level of competence, in particular the capability to phrase concerns and discuss interests related to potentially abstract topics in local sustainable development. Thirdly, participation consumes time and resources (Day, 1997).

The desire to actually participate is a second limitation. Citizens tend not to engage in environmental decision-making processes if they do not feel a responsibility or an acute threat. *In general, people are inclined to become involved in decision-making issues only when they think that the issue is in their immediate interest* (Sewell &

Table 1.2 Allowable levels of participation

Participants role	Government role
Has control	Asks participant to make key decisions
Has delegated authority	Delegates part of its authority
Plans jointly	Plans jointly
Advises	Asks and takes advice
Is consulted	Consults
Receives information	Gives information

Coppock, 1977). The wish to participate is influenced by the type of decision. People have additional difficulties in participating in decisions about strategic goals, norms, and values than in concrete, operational decisions. Firstly, for participants, in contrast with operational decision-making, in strategic decision-making it is less clear what is personally at stake. Secondly, participation at the strategic level requires more knowledge and time, which brings us back to the issue of the time and resource constraints of ordinary citizens as compared to experts, government officials, and interest groups. Therefore, the desire for broad participation is also related to the problem of representativeness. Even if people wish to participate, their capability of articulating wishes and perceptions differs widely. This might well be dependent on education level, for example. Participation tends to be biased in favour of the dominant actors (e.g. experts, officials, and interest groups) who have the time, energy, and money necessary to participate in deliberations (Woltjer, 2000). It could well be that those who do have the time and opportunities to participate are not representative of the wider population, but have more extreme opinions (Fiorino, 1990).

Finally, there is the problem of the *creation of expectations*. Allowing participation processes to take place could raise expectations of real influence. However, public participation is not a form of direct democracy that sets aside representative democracy (Alexander, 1996; Goldberg, 1985; Woltjer, 2000). Conversely, participation without influencing consequences is not a very attractive proposition for citizens.

The permitted level of participation is specified in the organisational set-up of the participatory process, and this organisational set-up is determined by the participation rules we defined above. In general, the choices made by decision makers are, besides the various levels of the institutions involved, influenced by the physical surroundings of the process and culture (Ostrom, 1986, 1990). Participation methods are often central in the organisational set-up. Here we define a participation method as a specific method for generating information from specifically defined participants, and to process this information in the decision-making process. In addition to participation methods, the cultural, institutional, and physical environments of the decision-making process also define the organisational set-up (Coenen, Huitema & O'Toole, 1998). The law may require certain participation methods. For example, environmental impact assessment regulations may stipulate a public hearing to receive public comments. In other cases, public involvement is obligatory but not the use of any particular method. Some methods are particularly favoured by certain organisational departments, in certain countries, or in certain professional circles. In the next section, we will discuss participation methods that are appropriate for specific participation purposes and their characteristics.

1.5 Participation Methods: Purpose and Organisational Set-up

A range of techniques and approaches for public involvement have been developed by government authorities, academics, and consultants. There is a vast amount of literature on the theoretical foundations of, and experiences with,

participation methods. General limits and strengths of different approaches are well documented by academics and policy organisations (see for instance Abelson et al., 2003; Chess & Purcell, 1999; Creighton, Priscoli, & Dunning, 1998; Fiorino, 1990; IAP, 2003; Pound et al., 2003; Renn et al., 1995; Rowe & Frewer, 2000, 2004; WHO, 1999).

Different participatory processes or tools match various purposes of participation. As mentioned earlier, in terms of decision-making from an instrumental perspective, public participation will improve:

1. The information available for the decision
2. The assessment of the alternatives
3. The potential for action and implementation (through support building and conflict reduction); as explained below

Ad 1. Some participation methods primarily have the objective of providing information input for the decision. This information can be quite varied, ranging from local knowledge to the assessment of the public needs and priorities. Often the methods that are primarily designed to gather information (such as mail or telephone surveys or informational public hearings) also have a feedback aspect. For instance, public hearings will have space for audience comments, and question and answer periods.

Ad 2. For the assessment of alternatives, more extensive feedback is necessary. Methods such as citizen advisory committees, workshops, and negotiated rule-making will contribute to improved judgement, deliberation, or reasoned discussion.

Ad 3. Any participation method that provides a forum for public discussion, or provides a channel to reach decision makers, could potentially contribute to support building and conflict reduction. However, some of the more traditional participation methods, such as public hearings, can easily lead to adversarial confrontations.

In Table 1.3, some typical participation methods for the various instrumental purposes we have distinguished are listed.

In this volume, we do not only consider novel and innovative approaches. Some traditional methods such as public hearings are not only the most common but are also relatively cheap, easy to implement, and fast. The use of information technology, which has revolutionised communications, will make it possible to revisit these more traditional methods of engaging with the public.

Sometimes methods are seen as innovative or novel because they focus on argumentative discourse and deliberation (Renn et al., 1995). Participation methods can also be seen as novel because they make use of established social science methods such as group-work techniques (brainstorming, mind-mapping) or specific research tools such as focus groups.

We put forward the following arguments for looking at a broad spectrum of participation methods:

– Different participation methods have different purposes and should be judged in how far they fulfil a particular purpose. Even if a particular (traditional)

Table 1.3 Purpose of participation and appropriate methods

Purpose	Appropriate methods
Additional source of ideas and information	Citizens' jury Consensus conferencing Focus groups Deliberative opinion poll Citizens' panel Referendum Teledemocracy
Monitoring and appraisal by citizens	Community needs analysis Priority search Public scrutiny Village appraisal Parish mapping Community indicators
Broadening of public support and reducing the level of conflict by bringing stakeholders (including government) together	Public meetings Planning for real mediation Consensus-building Future search Community visioning Round tables

method has a certain general weakness, it can still be relevant for a particular purpose.

– Not only novel and innovative participation methods contribute to decision quality as we have defined it here. Traditional methods are also of importance when asking whether a participatory approach in a decision-making process leads to 'better' decisions.
– In policy practice, a mix of participation methods could be more fruitful than the application of one specific innovative method. In a particular process, the limits of one method could be compensated for by the use of a supplementary method. This is particularly of interest if one is interested in the decision consequences of a particular mix of methods.

Participation methods have to be judged within their specific context and organisational set-up if we want to study the link between institutional participatory arrangements and effective decision-making. Some aspects of the institutional arrangements, such as the number of participants involved or the particular suitability of a specific decision-making stage, can be generalised. Table 1.4 outlines certain characteristics of participatory methods discussed in this book based on two of the main questions we distinguished in Section 1.4: *who can participate, and what is the mec hanism for pr ocessing the public's input*? The succeeding chapters will provide further insight into another major question: *how is information generated in the participation process, and who has access to this information*?

Table 1.4 Participation methods used in this book and their characteristics

Type of participation	Who can participate and why?	What is the mechanism for processing the public's input?
Focus groups	Small group (5–12) – representative of the public	Open discussion on the general topic with little direction from the facilitator. Used to assess opinions and attitudes
Citizen advisory committees	Small group – selected by the sponsor	Sounding boards to measure community acceptance. Representation of major organised interests
Planning cells	Small group – selected by the sponsor	Randomly selected groups of citizens temporarily released from work to discuss certain issues in seminar form. Citizens are apprised of the situation and presented with certain alternatives
Citizen juries/citizen review panels	12–20 members of public – selected by stakeholder	Panel consisting of a randomly selected group of citizens studies a certain issue. Citizen juries are representative of the community at large
Regulatory negotiation	Small number – representatives of stakeholder groups	Representatives of various affected interests are brought together to agree on the content of regulations
Mediation	Representatives of stakeholder groups	Voluntary attempt by parties involved to resolve their dispute. Normally assisted by a mediator
Consensus conference	10–16 members – selected as representative of general public	A lay panel with an independent facilitator questions expert witnesses chosen by the stakeholder panel
Public hearings	Interested citizens	Loosely structured open forums where members of the public can listen to proposals and respond
Public surveys	Large samples – representative of the population	Questionnaires for obtaining a representative impression of public opinion
Referenda	Potentially all members of national or local population – should at least be a minimum proportion	Vote cast by population on issue. Outcome is binding

1.6 The Contours of the Volume

There are several ways to explore the thesis that participation leads to a better quality of decision-making. A logical way would be to compare the results of participatory approaches with non-participatory approaches (Beierle, 2000, 2002; Huitema, 2002; Chess, 2000). For a particular type of participatory process, such as waste facility siting, one can compare the institutional arrangements in different countries but it will often be difficult to find processes without any participation.

In this volume, we present various participation methods in different institutional settings with varying levels of citizen and stakeholder participatory involvement.

The first chapters focus on one particular participation method in an environmental decision-making context.

Welp, Kasemir and Jaeger discuss the integration of expert assessments and citizen views, together supporting informed and accountable environmental decision-making through the use of the *Integrated Assessment Focus Group method*. The application of this method is illustrated on the basis of the European research project Ulysses.

The chapter by Halfacre presents experiences with *focus group interviews* as an innovative method for one particular instrumental function: understanding public views on risk in the context of environmental decision-making surrounding controversial and problematic hazard mitigation in cleaning up nuclear waste in the US. Flynn discusses the promises and the limits of *planning cells* and *citizen juries* for environmental decision-making, illustrated with comparative evidence and an Irish case study concerning waste policy. Oels uses the background of Local Agenda 21 processes to evaluate the contribution of the *future search conference method* to enhancing the quality of local decision-making. She evaluates the Future Search Conference Method on the basis of a UK and a German case study.

The second group of five chapters focus on a mix of participation methods. Coenen, Huitema and Woltjer deal with the impact of public involvement in environmental decision-making processes as related to sustainable household consumption. They describe four examples and discuss the limitations and possibilities for public participation in enhancing the quality of decision-making through public engagement in sustainable consumption policies. Huitema assesses the quality of the outcome of two case studies concerning waste facility siting. The chapter discusses a Canadian process that has been heralded as an example of a participatory approach and an UK case that was less participatory. Doak analyses a regional sustainable planning process in the South East of England that uses different types of information and knowledge during various planning stages. Woltjer discusses pragmatic functional arguments for participation as conceptualised in government studies and by planning professionals in Dutch infrastructure planning. Finally, Coenen writes about the impact of Local Agenda 21 (LA21) processes, as a participatory reform, on decision-making based on the growing empirical literature on LA21.

The final chapter draws conclusions as to which institutional arrangements that organise and shape public participation processes lead to better decisions.

References

Aarhus convention (1998). *Convention on access to information, public participation in decision-making and access to justice in environmental matters* (http://www.mem.dk/aarhus-conference/issues/publicparticipation/ppartikler.htm). Copenhagen, Ministry of Environment and Energy, Denmark, 21 April 1998.

Abelson, J., Forest, P. G., Eyles, J., Smith, P., Martin, E., & Gauvin, F. P. (2001). *Deliberations about deliberation: Issues in the design and evaluation of public consultation processes*. McMaster University Centre for Health Economics and Policy Analysis Research Working Paper 01-04, June 2001.

Abelson, J., Forest, P. G., Eyles, J., Smith, P., Martin, E., & Gauvin, F. P. (2003). Deliberations about deliberative methods: Issues in the design and evaluation of public participation processes. *Social Science & Medicine, 57*(2), 451–482.

Alexander, E. R. (1996). After rationality: Towards a contingency theory of planning. In S. J. Mandelbaum, L. Mazza, & R. W. Burchell (Eds.), *Explorations in planning theory*. New Brunswick, NJ: Center for Urban Policy Research.

Almond, G. & Verba, S. (1963). *The civic cultur e. P olitical attitudes and democr acy in f ive nations*. Princeton, NJ: Princeton University Press.

Arnstein, S. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners, 35*, 216–224.

Beierle, T. C. (1998). *Public participation in en vironmental decisions: An e valuation framework using social goals*. Resources for the Future. RFF Discussion Paper 99-06.

Beierle, T. C. (2000). *Quality of stakeholder-based decisions: Lessons from the case study record*. Resources for the Future. RFF Discussion Paper 00-56.

Beierle, T. C. (2002). The quality of stakeholder-based decisions. *Risk Analysis, 22*(4), 739–749.

Beierle, T. C. & Cayford, J. (2002). *Democracy in practice: Public participation in environmental decisions*. Washington, DC: Resources for the Future.

Brager, G. & Specht, H. (1973). *Community organizing*. New York: Columbia University Press.

Chess, C. (2000). Evaluating environmental public participation: Methodological questions. *Journal of Environmental Planning and Mana gement, 43*(6), 769–784.

Chess, C. & Purcell, K. (1999). Public participation and the environment: Do we know what works? *Environmental Science and Technology, 33*(16), 2685–2691.

Coenen, F., Huitema, D., & Hofman, P. S. (1998). *Green participation*? Paper prepared for the IIAS-conference 'The Citizen and the State', Paris.

Coenen, F., Huitema, D., & O'Toole, L. (1998). Participation and the quality of environmental decision-making. In F. Coenen, D. Huitema, & L. O'Toole (Eds.), *Participation and the quality of environmental decision making*. Dordrecht, The Netherlands: Kluwer.

Coenen, F., van de Peppel, R. & Woltjer, J. (2001). De evolutie van inspraak in de Nederlandse planning. *Beleidswetenschap, 14*(4), 313–332.

Coenen, F. H. J. M., Denters, S. A. H., & Klok, P-J. (2006). Netherlands: Case study. In H. Heinelt, D. Sweeting, & P. Getimis (Eds.), *Legitimacy and urban go vernance, a cr oss-national comparative study*. London: Routledge.

Creighton, J. L., Priscoli, J. D., & Dunning, C. M. (1998). *Public in volvement tec hniques: A r eader of ten year s experience at the institute for water r esources*. IWR Research Report 82-R1, Alexandria, VA: The Institute.

Day, D. (1997). Citizen participation in the planning process: An essentially contested concept? *Journal of Planning Literature, 11*(3), 421–434.

Denters, S. A. H. & Klok, P-J. (2006). Measuring institutional performance in achieving urban sustainability. In H. Heinelt, D. Sweeting, & P. Getimis (Eds.), *Legitimacy and urban governance, a cross-national comparative study*. London: Routledge.

Dietz, T. (2003). What is a good decision? Criteria for environmental decision making. *Human Ecology Review, 10*(1), 33–39.

Dror, Y. (1964). Muddling through. Science or inertia. *Public Administr ation Re view, 24* , 153–165.

Etzioni, A. (1967). Mixed-scanning. A 'third' approach to decision-making. *Public Administration Review, 27*, 385–392.

European Union (EU) (2002a). *Environment 2010: OurFutur e, our c hoice*. Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme published in OJ L 242 of 10/9/2002.

EU (2002b). *Guidance on public participation in relation to the water framework directive*. Active Involvement, Consultation, and Public Access to Information, Luxemburg.

Faludi, A. (1986). *Critical rationalism and planning methodology*. London: Pion.

Faludi, A. (1987). *A decision-centred view of environmental planning*. Oxford: Pergamon.

Fiorino, D. J. (1990). Citizen participation and environmental risk. A survey of institutional mechanisms. *Science, Technology & Human Values, 15*(2) (spring 1990), 226–243.

Goldberg, M. A. (1985). The irrationality of 'rational' planning: exploring broader bases for planning and public decision making. In M. Breheny & A. Hooper (Eds.), *Rationality in planning* London: Pion.

Huitema, D. (1998). Hazardous decisions. The siting of hazardous waste facilities in Canada and the United States. In F. Coenen, D. Huitema, & L. O'Toole (Eds.), *Participation and the quality of Environmental decision making*. Dordrecht, The Netherlands: Kluwer.

Huitema, D. (2002). *Hazardous waste facility siting in the UK, the Netherlands and Canada. Institutions and discourses*. Dordrecht, The Netherlands: Kluwer.

International Association for Public Participation (IAP) (2003). *Public participation toolbox* . www.iap2.org

Klok, P-J. & Denters, B. (2004). Urban leadership and community involvement: An institutional analysis. In M. Haus, H. Heinelt, & M. Stewart (Eds.), *Urban governance and democracy: Leadership and community involvement*. London/New York: Routledge.

Klok, P-J., Coenen, F. H. J. M., & Denters, S.A.H. (2006). Institutional conditions for complementarities between urban leadership and community involvement. In H. Heinelt, D. Sweeting, & P. Getimis (Eds.), *Legitimacy and urban governance, a cross-national comparative study* . London: Routledge.

Laird, F. N. (1993). Participatory analysis, democracy, and technological decision making. *Science, Technology & Human Values, 18*(3), 341–361.

Lindblom, C. E. (1959). The science of 'muddling through'. *Public Administration Review, 19*, 79–88.

Milbrath, L. W. (1965). *Political participation: How and why do people get involved in politics*? Chicago, IL: Rand McNally.

Organisation for Economic Co-operation and Development (OECD) (2001). *Governance for sustainable development: Five OECD case studies*. Paris: OECD.

Organization of American States (OAS) (2001). *Participation in decision-making for sustainable development, inter-American strategy for the promotion of public participation* . Washington, DC: Unit for Sustainable Development and Environment.

Ostrom, E. (1986). An agenda for the study of institutions. *Public Choice, 48*, 3–25.

Ostrom, E. (1990). *Governing the commons. The evolution of institutions for collective action* . Cambridge: Cambridge University Press.

Ostrom, E., Schroeder, L., & Wynne, S. (1993). *Institutional incentives and sustainable development. Infrastructure policies in perspective*. Boulder, CO: Westview.

Pound, B., Snapp, S., McDougall, C., & Braun, A. (Eds.) (2003). *Managing natural resources for sustainable livelihoods: Uniting science and participation*. London/Sterling, VA: Earthscan.

Renn, O., Webler, T., Rakel, H., Dienel, P., & Johnson, B. (1993). Public participation in decision-making: A three-step procedure. *Policy Sciences, 26*, 189–214.

Renn, O., Webler, T., & Wiedemann, P. (1995). *Fairness and competence in citizen participation. Evaluating models for environmental discourse*. Dordrecht, The Netherlands: Kluwer.

Rothstein, B. (1996). Political institutions: An overview. In R. E. Goodin & H. D. Klingemann (Eds.), *A new handbook of political science*. Oxford: Oxford University Press.

Rowe, G. & Frewer, L. J. (2000). Public participation methods: A framework for evaluation. *Science, Technology & Human Values, 25*(1), 3–29.

Rowe, G. & Frewer, L. J. (2004). Evaluating public-participation exercises. *Science, Technology & Human Values, 29*(4), 512–556.

Scharpf, F. W. (1997). *Games real actors play. Actor-centred institutionalism in policy research*. Boulder, CO: Westview.

Sewell, W. R. D. & Coppock, J. T. (Eds.) (1977). *Public participation in planning*. London: Wiley.

Simon, H. A. (1957). *Administrative behaviour*. 2nd ed., New York: Macmillan.

United Nations (UN) (2002). *Report of the world summit on sustainable development*. Johannesburg, South Africa, 26 August–4 September 2002.

Webler, Th. (1995). 'Right' discourse in citizen participation. An evaluative yardstick. In O. Renn, Th. Webler, & P. Wiedemann (Eds.), *Fairness and competence in citizen participation.*

Evaluating models for en vironmental discour se. Dordrecht, The Netherlands/Boston, MA: Kluwer.

Williams, B. A. & Matheny, A. R. (1995). *Democracy, dialogue, and environmental disputes. The contested languages of social regulation*. New Haven, CT: Yale University Press.

Woltjer, J. (2000). *Consensus planning, the relevance of communicative planning theory in Dutch infrastructure development*. Aldershot, Hampshire, UK: Ashgate.

World Health Organization (WHO) (1999). Community participation in local health and sustainable development: A working document on approaches and techniques. *European Sustainable Development and Health Series*: 4, EUR/ICP/POLC 06 03 05D.

Yosie, T. F. & Herbst, T. D. (1998). *Using stakeholder processes in environmental decisionmaking: An e valuation of lessons learned, k ey issues, and futur e c hallenges*. Washington, DC: Ruder Finn.

Chapter 2
Citizens' Voices in Environmental Policy

The Contribution of Integrated Assessment Focus Groups to Accountable Decision-Making

Martin Welp, Bernd Kasemir, and Carlo C. Jaeger

2.1 Introduction

Environmental problems are becoming increasingly complex. They are no longer limited to reducing a toxic by-product of a specific activity by some well-defined technological fix. Rather, for issues like climate change mitigation or integrated water management, intricate interactions among many natural and social systems have to be taken into account. Scientific uncertainties are significant, and many actors with diverging interests are involved. This has far-reaching implications for the roles of experts and of stakeholders, including ordinary citizens, in environmental policy-making.

On the one hand, the role of science and expert knowledge is changing. Major uncertainties, both in the science and the politics of environmental issues, mean that expert knowledge cannot provide a complete and uncontestable description of the issues. Rather than offering clear and compelling advice to determine policy, such expert knowledge becomes only one part of a broader process of social learning (Beck, 1994: 1–55; see also Lemos & Morehouse, 2005). While expert knowledge is required more than ever to address today's complex environmental problems, it is needed as evidence informing societal debates (Jasanoff, 1991: 29–47), rather than in the mode captured by the familiar aphorism of 'speaking truth to power'.

This also means that the roles of ordinary citizens and other stakeholders have also changed. Funtowicz and Ravetz (1992: 251–273) have stressed the importance

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of engaging an 'extended peer community' in science-based assessments of issues where both uncertainties and decision stakes are high. Including the views of ordinary citizens in environmental policy-making helps to avoid the dangers of 'technocratic decision-making', where policy formation is based on expert assessments only, rather than on expert knowledge combined with stakeholder views. In particular, including the views of citizens is of utmost importance for policy-makers, since many new policies can only be effective and successful if they are accepted by the majority of affected people. However, there is the complementary danger of 'populist decision-making', where expert knowledge is disregarded. For complex environmental problems this can lead to short-sighted decision-making leading to long-term problems.

What is needed is an integration of expert assessments and citizen views, together supporting informed and accountable environmental decision-making. For this, it is not sufficient to complement expert knowledge with classical techniques for screening public opinion through polls and surveys with the help of the telephone or email. Rather, procedures are needed which allow ordinary citizens to access expert knowledge and to make informed judgements – including valuations – on complex policy issues (Kasemir, Jäger, Jaeger, & Gardner, 2003). These judgements, together with the expert knowledge, can then support decision-makers in policy formation. Social environmental science can play an important role in developing and testing methods which bring together scientists, decision-makers, and the lay public. One such method is the Integrated Assessment (IA) Focus Group. This can provide a micro cosmos for policy evaluation and development (Jaeger, Schüle, & Kasemir, 1999: 195–219), where ordinary citizens can make informed judgements, supported by scientific knowledge, that is made both accessible and understandable for them.

The objective of the present chapter is to present this method of IA Focus Groups, and to discuss its contribution to accountable decision-making. The empirical part of the chapter is based on an exploratory research project: ULYSSES – '*Urban Lifestyles, Sustainability and Integrated Environmental Assessment*' (Welp, 2006a, 2006b). This project aimed to bridge the gap between environmental science and democratic policy-making in the climate domain. The project both tested and developed the IA Focus Group method. Similar methods, such as planning cells and citizen juries have been applied mainly to local or regional single-issue problems (cf. Renn, Webler, & Wiedemann, 1995). The special contribution of ULYSSES has been to design IA Focus Group procedures that allow ordinary citizens to become involved in assessment processes for highly complex environmental issues such as global change. The IA Focus Group method can also be applied in a number of other policy areas, where regional policies and global issues interact. It has the potential to contribute to informed and accountable decision-making and environmental management by bringing together expert knowledge and the views of ordinary citizens.

This chapter is structured as follows: in Section 2.2 we discuss the need for methods that enhance administrative and representative democracy decision-making. In Section 2.3 we document the origins and basic assumptions of the IA Focus Group method, and its application in the EU project, ULYSSES. Results obtained by using the method are briefly discussed. The chapter then proceeds to analyse how the method can be further developed (Section 2.4), for example so that it can be applied in other policy areas or to enhance the working of parliaments.

2.2 The Need for Methods to Enhance Administrative and Representative Democracy Decision-Making

In dealing with complex environmental problems, decision-makers are often confronted with uncertainty in scientific knowledge and ambiguous and conflicting goals. For example, climate policy on the local and regional level is confronted with such uncertainty and ambiguity, and such policy has direct implications on everyday life and the lifestyle of citizens. Thus, involving ordinary citizens in the debate on climate change can be important also for the national and international levels of climate policy-making (European Climate Forum, 2004; IPCC, 2007; Sterman and Sweeney, 2007).

There are several reasons for the need to find ways of involving citizens in decision-making, not only on the local level but also on the global level. Firstly, citizens' demands for broader and institutionalised participatory channels are expected to increase (UNEP, 1999). The changed perception of the role of civil society in achieving the objectives of sustainability has resulted in the adoption of principles of co-management of natural resources, and in a close collaboration between governments, non-governmental organisations, community organisations, and the private sector in setting standards and preparing environmental policies or action plans (UNEP). The World Commission on Water in the 21st century notes, in a report on water policy and management, that the old model of 'This is government's business' must be replaced by a model in which stakeholders participate *at all levels* (emphasis added). Local participation is required, but on a more aggregate level through such new institutional arrangements as 'user parliaments' which work with governments (World Water Commission, 2000).

There is also a certain lack of trust in political decision-makers, especially in many Eastern European and developing countries where democratic governance is a new feature. In many Western countries democratic institutions such as political parties also lack credibility. Enhancing representative democracy with public participation procedures has been tested in a number of pilot projects (see for example, Nelkin, 1977). The dominant tune in policy and planning, however, can be characterised as minimal participation especially on issues extending the local level.

The role of civil society is changing in policy, as is the role of science. It has become clear that science alone cannot provide solutions to global sustainability problems. Much of the apparent disillusionment is related to the uncertainty of research results on complex environmental issues. For example, climate models are characterised by an incomplete understanding of the modelled system, chaotic and non-smooth behaviour, complex feedback loops, and linkages with other anthropogenic environmental changes (van der Sluijs, 1996). Policy debates tend to be polarised in form, and proponents will utilise what models and information they have at hand. There should at least be a common understanding of the powers and limits of science, and scientists, in these contexts.

It has also become clear that expert framing of issues alone is not sufficient. Relying on scientific arguments alone entails the danger that certain dimensions of a problem, that are important for the public, will be missed (Kasemir, Schibli,

Stoll, & Jaeger, 2000). Nowotny (2001) calls for the production of socially robust knowledge. Scientific 'knowledge' about intrinsically uncertain and strongly value-related issues becomes vulnerable if socially contested, especially if it derives its legitimacy from having been produced 'objectively'. Lindblom and Cohen (1979) make distinctions among scientific, ordinary, and interactive knowledge. The first owes its origin to distinctive professional techniques; while the second owes its origin to common sense and casual empiricism. Interactive knowledge is produced in a process of dialogue, and can thus be regarded as more robust than scientific or ordinary knowledge alone. In participatory, integrated assessments, scientific knowledge is complemented by relevant ordinary knowledge impregnated by the norms, values and interests of the participants. Dialogues between the scientific community and the extended peer community, be it ordinary citizen or stakeholders having a stake or interest in a specific problem or issue, provide a setting for mutual learning.

2.3 The Integrated Assessment (IA) Focus Group Method

2.3.1 Origin, Principles and Basic Assumptions

The IA Focus Group method, discussed in this chapter, has been developed as a participatory technique in the new research field of integrated assessment. Traditional disciplinary research has proved unable to grasp complex environmental problems. Integrated assessments strive to provide more useful information for decision-makers than can be achieved with traditional disciplinary research. They aim to integrate pictures of complex decision situations, rather than provide highly detailed but not integrated pieces of knowledge (Rotmans & Asselt, 1996). Integrated assessment[1] has, in the past, been developed for issues such as acid rain (Alcamo, Shaw, & Hordijk, 1990) and global climate change (Weyant, Davidson, Dowlatabadi, Edmonds, & Grubb, 1996). Integrated assessment for these problems was first developed in the form of model building and expert panels. More recently, the involvement of stakeholder participation in integrated assessments has been studied (see Kasemir, Schibli, et al., 2000). The methods applied in Integrated Assessment can thus be divided into two types: analytical methods, including modelling scenario development and risk analysis; and participatory methods, which include dialogue methods, policy exercises, and mutual learning methods (e.g. focus

[1] IA is often also described as Integrated Environmental Assessment (IEA) (cf. Toth & Hizsnyik, 1998). The approach also has much in common with Environmental Impact Assessment (EIA). However, in contrast to EIA, which in many countries is an obligatory procedure to assess the impacts of for example an infrastructure project, IA is a more recent and more informal approach that is oriented towards policy advice on issues broader than a particular project or sectoral programme.

groups) (Rotmans, 1998). Increasingly there are calls for IA models, scenarios, and participatory methods to be used in a complementary manner. Citizen participation is thus of increasing interest among the integrated assessment community (Jäger, 1998).

Integrated assessment can be seen as the culmination of confluence and evolution of several disciplines that have dealt with the perception, assessment, and management of risks during the last 3 decades (Jäger, 1998; Toth & Hizsnyik, 1998). It is becoming a normal procedure in many environmental studies. Increasingly, both participatory methods and computer modelling are used in Integrated Assessment. Within the more discursive approaches to IA, several methodologies such as focus groups and policy exercises have been used, and the choice varies depending on the participants that are called to intervene (cf. Rotmans, 1998). The IA Focus Groups method, developed during the EU project ULYSSES, was one of the first examples of a new kind of 'hybrid' and more participatory approach, where computer models are placed in dialogic settings composed by heterogeneous groups of lay people (Dahinden, Querol, Jäger, & Nilsson, 2002).

The IA Focus Groups method is a refinement of focus group techniques. The focus group method is a combination of two social scientific research methods: the focused interview and group discussions. It was first introduced by Merton and Kendall (1946) and the method is very popular in marketing research (Cox & Higginbotham, 1976), health and family research (Basch, 1987: 411–448), as well as policy, media and communication research (Byers & Wilcox, 1991; Deswouges & Smith, 1988: 479–484). Even though the range of applications is so broad, only recently focus groups have been applied in environmental research and policy. Since the techniques of conventional focus groups are not well suited to providing information for integrated assessments, they have been adapted in several ways in the development of IA Focus Groups. The adaptations include a longer and more structured discussion process, allowing spontaneous associations to be explored by the participants (e.g. in collage work) as well as the interaction with current research findings (usually by the use of computer models in the focus groups), before the participants themselves summarise their views on the focal topic. Such focus groups were called IA Focus Groups to distinguish them from other types. For a more in-depth discussion on IA Focus Group procedures see Kasemir, Jaeger, and J. Jäger (2003).

The concept of good decision-making is generally not explicitly addressed in integrated assessment literature. Especially contributions which emphasise analytical methods, such as modelling and scenario development, often exclude such questions. The underlying premise can be described as a wish that scientific advancements, rational reasoning, and new insights, improve the quality of decision-making. Often mechanisms to link IA with policy-making are however missing, and little effort is made to enhance the dialogue with decision-makers. A weakness of such approaches is that they may turn out to be too technocratic and too expert-oriented. In more recent IA exercises, which in addition to modelling are heavily based on participatory methods, the legitimation of public participation has been grounded in the tradition of democratic decision-making. Democratic fairness

in conjunction with scientific competence can be described as the underlying concept of good decision-making (Dürrenberger et al., 1997). Participatory processes do more than make democratic institutions perform better in accomplishing given tasks. They are becoming the catalysts for new civic partnerships and even new governance structures that transcend the old sectoralised ones (Priscoli, 1999). IA exercises have the potential to bring together scientific and ordinary knowledge, and thus improve the quality of decision-making.

2.3.2 Developing and Applying the Method in the ULYSSES Project

The Integrated Assessment (IA) Focus Group method was developed and tested in the European research project ULYSSES (*Urban Lifestyles, Sustainability and Integrated Environmental Assessment*). In the project, discussed in more detail by Kasemir, Jäger, et al. (2003), opinion formation, by informed citizens, on climate policy was studied by means of group discussions. Randomly selected lay persons were provided with access to the latest scientific knowledge and computer models of global environmental change. They were provided with the opportunity to reflect and debate among themselves and to define measures for addressing climate change. The project involved people of various ages and educational backgrounds. It covered seven urban regions throughout Europe: Barcelona, Venice, Athens, Zurich, Frankfurt, Manchester, and Stockholm. Between 1996 and 1999 approximately 600 citizens took part in the exercise.

Computer models were used to communicate scientific knowledge and the uncertainties involved to the focus group participants, and to stimulate the discussion. The models applied in each group included two or more of the following: IMAGE (Alcamo, 1994), TARGETS (Rotmans & de Vries, 1997), PoleStar (Raskin, Heaps, Sieber, & Pontius, 1996) and ‘Personal CO2 – Calculator’ (Schlumpf, Behringer, Dürrenberger, & Pahl-Wostl, 1998). The first two models address global dimensions of climate change, the latter ones regional dimensions. For an overview of the used models see Dahinden et al. (2002). In ULYSSES, the models were not considered as truth machines. For this reason at least two different models were used in each focus group, each having a distinct approach and underlying assumptions. These assumptions as well as the uncertainties in each model were made clear to the participants.

The focus group participants were asked to first produce collages reflecting their spontaneous thoughts about climate change (following Kasemir, Dahinden, et al., 2000), then to discuss scenarios with the help of computer models (Dahinden et al., 2002), and finally to summarise their views, after the group debates, in citizens’ reports (Querol, Gerger Swartling, Kasemir, & Tàbara, 2002). The group discussions were recorded on audio- and videotape. For a detailed description of the design of focus groups see Kasemir, Jaeger, et al. (2003).

2.3.3 Results of the ULYSSES Project

Many of the focus group participants were surprised by the uncertainties in climate change modelling and research. While participants often saw further research as necessary, one of the main messages from their reports was that they usually did not advocate delaying action to combat climate change until additional scientific evidence is available. Further, the concrete suggestions, presented by the groups, focused on mitigating the causes of climate change rather than on adapting to the effects. The citizen statements could be grouped in the following categories: assessment of causes and impacts, suggested response measures (such as by whom, where and when, responses should be made), and perceived barriers to action.

Since ULYSSES was an exploratory research project where the IA Focus Group method was to be developed and tested, the impact on actual decision-making is indirect and this was also explained to the participants of the focus groups. For example the Barcelona research team explained to the participants that the recipients of the citizen reports were mainly ULYSSES researchers and that, only to some extent, would their debates and their reports reach EU officials. The research team also pointed out that, since the exercise was part of an exploratory research study, the team could not guarantee that the participants' views would be taken into account by the policy community.

ULYSSES emphasised the explicit consideration of various cultural contexts within European climate policy. The focus group design, as developed by ULYSSES, helps to understand the cultural and social differences which are of great importance for an effective implementation of environmental and resource-use policy in Europe. In ULYSSES, the cultural heterogeneity in Europe was taken into account by selecting seven urban regions in different countries across Europe. Within the European Union cultural heterogeneity has further increased following the inclusion of new member states from Eastern Europe. IA Focus Groups can make a positive contribution in supporting democratisation. In an increasingly global decision-making environment, the potential of a participatory method to accommodate different cultural contexts gets increasingly important.

ULYSSES recognised that there was a potential risk of manipulation of IA Focus Groups. For example, if the method is adapted to include broader policy advice, the moderator can, to some extent, have an impact on the discussions and outcomes by selecting certain information to be presented and by choosing certain models. The possibility of abusing the method must be taken into account. Rather than using this as a reason for not applying the method, careful application is needed: adequate time should be allotted for studying the models and discussing further issues, more than one moderator should be used, the use of models should be as transparent as possible, and the participants should be able to ask questions concerning the scientific input. Moreover, the participants should know that all results from the exercise will be published in open literature, not in some restricted format.

The costs of an IA Focus Group effort, including preparation, moderation and documentation can be as high as for many other participatory methods. A series of

parallel focus groups (each of 6–8 persons) can, however, provide insights which would not be acquired using non-dialogic methods. A group discussion on complex global and/or regional issues gives a multitude of perspectives, these can enhance the quality of policy-making and improve implementation.

2.4 How Can the IA Focus Group Method Be Further Developed?

2.4.1 Use in Other Policy Areas, and in Improving Environmental Management

IA Focus Groups can be used in policy areas other than climate policy, and to improve environmental management. Policy areas where IA can be applied include water policy, land use policy, and agricultural policy. Presently, in these policy domains, examples of IA exercises are rare. For example, water use issues are becoming increasingly global and complex, with direct implications on everyday life and human well-being and so integrated water policies are clearly needed. One step in this direction is the EU Water Framework Directive adopted in 2000. There is great diversity in regional practices and different traditions of water management, and these need to be taken into account. Integrated and flexible management is needed to fulfil the requirements of the directive. The Water Framework Directive emphasises the importance of public participation. As many issues in River Basin Management cannot be solved on the local level alone, IA Focus Groups provide a promising new tool for public involvement on river the basin level.

Environmental management, such as land and water management, can benefit, both in practical and theoretical terms, from the latest advances and pilot efforts in Integrated Assessment. The need for more integrated environmental management has been widely recognised. Some of the new approaches include Integrated River Basin Management (IRBM) (Kirby & White, 1994; Mostert et al., 1999) and Integrated Coastal Zone Management (ICZM) (Sorensen, 1997). These approaches, however, lack adequate interdisciplinary scientific support and a coherent theoretical backing (Welp, 1999). Parson (1995) has argued that IA can serve the long-term goal of capacity building in such fields. Thus they can benefit from Integrated Assessment which aims to gather, structure, synthesise and present interdisciplinary knowledge with relevance for policy. In particular, IA Focus Groups, conducted with stakeholders, can be a way forward towards better environmental management.

Environmental management in river basins or coastal areas is typically on the regional level. Regional Integrated Assessment is a promising approach which tries to model global sustainability problems within a defined region. A pioneering effort in this direction was CLEAR (Climate and Environment in the Alpine Region), which assessed regional responses to, and management options for climate change (Cebon, Dahinden, Davies, Imboden, & Jaeger, 1998).

Rotmans (1998) suggests that in Regional Integrated Assessment catchments would provide the good case studies needed to further improve and test integrated assessments. In the past, integrated assessment has been developed mainly for macroscale issues such as acid rain and global climate change. In contrast to integrated assessment models, stakeholder participation techniques were usually developed for local issues (Renn et al., 1995). A new approach would be to bring together both modelling and participatory methods on a mesoscale, as in river basin assessments. One advantage of such assessments would be their suitability for identifying 'hot spots' in watersheds.

2.4.2 Better Use of Ordinary Knowledge in Decision-Making

Integrated Assessment provides a framework in which to structure existing knowledge. Achievements have been made in bringing together knowledge from various scientific disciplines including climatology, hydrology, physical geography, remote sensing, economics and other social sciences. Recently, there has been a growing recognition that involving the public, and the end users, in the early stages of developing integrated assessment computer models, tools, and procedures, can increase the policy relevance, usefulness and equity of the products obtained. Discursive approaches have the advantage that they can bring into an assessment a kind of qualitative knowledge that at present is rarely incorporated in the simulation models (many of which present a rigid structure and can be of little interest for the users). The importance of involving stakeholders in order to include local knowledge has also been highlighted by Wynne (1996). Participatory IA has the potential to inject ordinary knowledge into decision-making procedures.

Ordinary knowledge can often not be presented in crisp numerical values. This is a great challenge for modelling. Let us take the example of river basin management, as mentioned in the previous section and assume that water management can be improved through a meaningful involvement of farmers in water policy planning. A regional integrated assessment could focus on downstream and upstream land and water uses. Modelling the linkages between different uses can be carried out using various computer models. If both modelling and participatory methods are used to analyse policy options then the computer models must be able to cope with qualitative information. One example, SimCoast™ (McGlade, 1999), enables modellers to map human activities along a river or coast on a two-dimensional transect. The software helps to combine scientific knowledge and local knowledge. Issues such as the impact of upstream land use on water resources downstream can be described in crisp values or in qualitative terms (using fuzzy logic) and translated into rules for policy formulation and decision-making. SimCoast™ is not a scientific modelling tool, but rather a management oriented expert system which acknowledges the existence of scientific expert knowledge and local expert knowledge. Such software, which can be broadly characterised as a Decision Support System (DSS), could be applied in conjunction with scientific computer

models. Ideally such a scientific model could be embedded in a user-friendly decision support tool. Such a system, accompanied with well-prepared dialogues between experts and stakeholders, would help to inject ordinary knowledge into decision-making. This requires new kinds of DSS and modelling tools, and closer co-operation between these two areas of software development. What is needed in river basin management is 'knowledge integration'. Existing information and data are more often than not organised by political or map boundaries, rather than by watersheds.

Experiences with citizen deliberations in IA Focus Groups have shown that there is great need for better visualisation. IA models have so far relied mainly on graphs and maps as visual output, and these are well suited for scientific audiences but not lay ones. Additional visualisation of models may be important for other stakeholder groups, including decision-makers (cf. Dahinden et al., 2002). In IA Focus Groups citizens can have access to the latest scientific knowledge on the problem at hand. In the best case scenario a scientist (or team of scientists) can be a 'facilitator for learning' within the group. Similarly, a moderator should be seen as the 'facilitator for effective team work'. A solution to the need for better visualisation could be a 'visual facilitator': a person who is able to capture the essence of the discussions and produced material, so that the results can be transmitted to a broader audience. Also, during the discussions within the IA Focus Groups, symbolic representation can help in structuring the problems and the complex interactions. Topics of uncertainty, polarisation, and ambivalence, may thus become more tangible (cf. Kasemir, Dahinden, et al., 2000).

2.4.3 Enhancing the Work of Parliaments

The Integrated Assessment Focus Group method has an advisory character in relation to decision-makers. Stakeholder involvement and public participation in a field like climate policy will not mean that stakeholders or citizens elaborate specific measures, say for the implementation of the Kyoto protocol. The machinery of international environmental diplomacy does not work along such lines. Precisely for this reason, it is especially interesting to study how participatory procedures work in this domain. The use of IA Focus Groups improves decisions indirectly, by helping decision-makers, as well as researchers, perceive and understand the perspectives of lay-persons on climate issues.

The crucial question in evaluating the contribution of IA Focus Groups to good decision-making is how decision-makers are involved in the process and informed about the outcomes. To become an accepted tool for policy planning, there needs to be awareness among decision-makers of the benefits of the IA Focus Group method. Even though focus groups as such have been successfully used in marketing, developing political campaigns etc. their application in conjunction with complex environmental issues requiring the integration of scientific and lay knowledge have so far been rare.

There are unexplored possibilities of using IA Focus Groups to enhance the work of parliaments. Parliaments, as institutions where long-term social choices can and should be debated, may become the main recipients of citizen recommendations. Members of parliaments can benefit from IA exercises with the public in two ways: (a) understanding citizen perceptions of the problem at hand and (b) testing the acceptance of planned public policies. IA can thus serve as a 'reality check' for public policies. We believe that a sound institutional embedding of the method would provide important opportunities for integrating the assessments of citizens and other stakeholders more directly in environmental policy than is the case today. This could help in ensuring that the policies pursued are representative of the views and aspirations of the community they are supposed to benefit (Querol et al., 2002).

How can suitable interfaces between IA Focus Groups and policy-makers be developed? Rowe and Frewer (2000) suggest that, in some participatory methods, members of the public could be selected to take part in exercises that provide them with a degree of decision-making authority. However, in conjunction with parliaments IA Focus Groups should have only an advisory role. Decision-makers should commit themselves to taking citizens voices and recommendations into account. Such commitments, while lacking any legally binding character, do have informal power (Leskinen, 1994). A clear embedding in actual policy-making would also encourage the work of citizen groups. The institutionalisation of integrated assessment focus groups in various fields of environmental planning and decision-making, such as the preparation of river basin management plans, requires, as a first step, pilot exercises. Since the method is not strongly institutionalised in public policy-making through laws or acts there remains room for experimentation. This may be a strength of the approach: flexible application and tailoring to a specific problem. Political support for such advisory exercises is likely to be more important than a rigid bureaucratic or juridical embedding in a decision-making process.

IA Focus Groups are generally assembled with members of the general public. However, in IA, the inclusion of policy-makers and business people might also be fruitful (Dürrenberger et al., 1997). In ULYSSES, in addition to focus groups with ordinary citizens, a two-stage policy exercise was carried out, first with representatives of venture capital and technology firms (workshop), and later with representatives from the European Commission (interviews) (Kasemir, Toth, & Masing, 2000). Such designs can be helpful in increasing the awareness among different actors of the method and the issues involved.

The interface between IA Focus Groups and the mass media may in the future also gain increasing importance. IA Focus Groups could, for example, interact with public opinion formation by involving TV stations or by using video transmission via the internet, or both. Through the use of popular media the learning process could be extended and the insights gained communicated to a broader public. Parliamentary debates could be enhanced by adding a structured feedback of citizens' points of view. Along these lines, further developments of the IA Focus Group method have the potential to support accountable decision-making on complex environmental problems by building bridges between expert knowledge, citizens' views, media communication, and political decision-making.

References

Alcamo, J. (Ed.) (1994). *IMAGE 2.0: Integrated modelling of global climate c hange*. Dordrecht, The Netherlands: Kluwer Academic Publishers.

Alcamo, J., Shaw, R., & Hordijk, L. (1990). *The RAINS model of acidification, science and strategies in Europe*. Dordrecht, The Netherlands: Kluwer.

Basch, C. E. (1987). Focus group interview: An underutilized research technique for improving theory and practice. *Health Education Quarterly, 4*, 411–448.

Beck, U. (1994). The reinvention of politics: Towards a theory of reflexive modernization. In U. Beck, A. Giddens, & S. Lash (Eds.), *Politics, tradition and aesthetics in the modern social order*. Cambridge: Polity.

Byers, P. Y. & Wilcox, J. R. (1991). Focus groups: A qualitative opportunity for researchers. *Journal of Business Communication, 1*, 63–78.

Cebon, P., Dahinden, U., Davies, H. C., Imboden, D., & Jaeger, C.C. (Eds.) (1998). *Views from the Alps. Towards regional assessments of climate c hange*. Cambridge, MA: MIT Press.

Cox, K. K. & Higginbotham, J. B. (1976). Application of focus group interview in marketing. *Journal of Marketing, 1*, 77–80.

Dahinden, U., Querol, C., Jäger, J., & Nilsson, M. (2002). Citizen interaction with computer models. In B. Kasemir, J. Jäger, C. C. Jaeger, & M. T. Gardner (Eds.), *Public participation in sustainability science*. Cambridge: Cambridge University Press.

Deswouges, W. H. & Smith, K. V. (1988). Focus groups and risk communication. The science of listening to data. *Risk Analysis, 4*, 479–484.

Dürrenberger, G. et al. (1997). *Focus groups in integrated assessment. A manual for a participatory tool*. ULYSSES Working Paper WP-97–92. Darmstadt, Germany.

European Climate Forum (2004). *What is dang erous climate c hange?* Initial Results of a Symposium on Key Vulnerable Regions Climate Change and Article 2 of the UNFCCC Buenos Aires, 14 December 2004. Internet: http://www.european-climate-forum.net

Funtowicz, S. O. & Ravetz, J. R. (1992). Three types of risk assessment and the emergence of post-normal science. In S. Krimsky & D. Golding (Eds.), *Social theories of risk* . Westport, CT: Praeger.

IPCC (2007). Summary for policy makers. *Climate c hange 2007: The physical science basis* . Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press.

Jaeger, C. C., Schüle, R., & Kasemir, B. (1999). Focus groups in integrated assessment: A microcosmos for reflexive modernization. *Innovation, 2*, 195–219.

Jäger, J. (1998). Current thinking on using scientific findings in environmental policy making. *Environmental Modelling and Assessment, 3*, 143–153.

Jasanoff, S. (1991). Acceptable evidence in a pluralistic society. In D. G. Mayo & R. D. Hollander (Eds.), *Acceptable e vidence: Science and values in risk mana gement*. New York: Oxford University Press.

Kasemir, B., Dahinden, U., Gerger, Å., Schüle, R., Tabara, D., & Jaeger, C. C. (2000). Citizens' perspectives on climate change and energy use. *Global Environmental Change, 3*, 169–184.

Kasemir, B., Schibli, D., Stoll, S., & Jaeger, C. C. (2000). Involving citizens in climate and energy assessments. *Environment, 3*, 32–42.

Kasemir, B., Toth, F., & Masing, V. (2000). Climate policy, venture capital, and European integration. *Journal of Common Market Studies, 5*, 889–901.

Kasemir, B., Jaeger, C. C., & Jäger, J. (2003). Citizen participation in sustainability assessments. In B. Kasemir, J. Jäger, C. C. Jaeger, & M. T. Gardner (Eds.), *Public participation in sustainability science*. Cambridge: Cambridge University Press.

Kasemir, B., Jäger, J., Jaeger, C. C., & Gardner, M. T. (Eds.) (2003). *Public participation in sustainability science*. Cambridge: Cambridge University Press.

Kirby, C. & White, W. R. (Eds.) (1994). *Integrated river basin development*. Chichester, UK: Wiley.

Leskinen, A. (1994). *Environmental planning as learning: The principles of ne gotiation, the disaggregative decision-making method and par allel or ganization in de veloping the r oad administration*. Helsinki: University of Helsinki.

Lemos, M. C. & Morehouse, B. J. (2005). The co-production of science and policy in integrated climate assessments. *Global Environmental Change, 15*(1), 57–68.

Lindblom, C. E. & Cohen, D. K. (1979). *Usable knowledge: Social science and social pr oblem solving*. New Haven, CT/London: Yale University Press.

McGlade, J. (1999). *SimCoast: An e xpert system for sustainable coastal zone mana gement. Interdisciplinary scientific methodologies for the sustainable use and mana gement of coastal resource systems*. ASEAN – EU Workshop on Major Environmental Inputs, June 20–26, Singapore.

Merton, R. K. & Kendall, P. (1946). The focused interview. *American Journal of Sociolo gy, 51*, 541–557.

Mostert, E., van Beek, E., Bouman, N. W. M., Hey, E., Savenije, H. H. G., & Thissen, W. A. H. (1999). *River basin management and planning*. Keynote paper for International Workshop on River Basin Management, October 27–29, The Hague, www.ct.tudelft.nl/rba/Keynote.html

Nelkin, D. (1977). *Technological decisions and democr acy. European experiments in public participation*. Beverly Hills, CA/London: Sage.

Nowotny, H. (2001). *Re-thinking science. Knowledg e and the public in an a ge of uncertainty*. Cambridge: Polity.

Parson, E. (1995). Integrated assessment and environmental policy making. *Energy Policy, 4–5*, 463–475.

Priscoli, J. D. (1999). *What is public participation in water r esources management and why is it important? Participatory processes in water mana gement*. Satellite Conference to the World Conference on Science, Technical Documents in Hydrology 30. UNESCO, International Hydrological Programme, June 28–30, Budapest.

Querol, C., Swartling, Å. G., Kasemir, B., & Tàbara, D. (2002). Citizens' reports on climate strategies. In B. Kasemir, J. Jäger, C. C. Jaeger, & M. T. Gardner (Eds.), *Public participation in sustainability science*. Cambridge: Cambridge University Press.

Raskin, P., Heaps, C., Sieber, J., & Pontius, G. (1996). *PoleStar system manual*. Boston, MA: Stockholm Environment Institute.

Renn, O., Webler, T., & Wiedemann, P. (1995). *Fairness and competence in citizen participation: Models for environmental discourse*. Dordrecht, The Netherlands: Kluwer.

Rotmans, J. (1998). Methods for IA: The challenges and opportunities ahead. *Environmental Modelling and Assessment, 3*, 155–179.

Rotmans, J. & Asselt, M. B. A. (1996). Integrated assessment: A growing child on its way to maturity. *Climatic Change, 3–4*, 327–336.

Rotmans, J. & de Vries, B. (1997). *Perspectives on global c hange: The T ARGETS appr oach*. Cambridge: Cambridge University Press.

Rowe, G. & Frewer, L. J. (2000). Public participation methods: A framework for evaluation. *Science, Technology & Human Values, 1*, 3–29.

Schlumpf, C., Behringer, J., Dürrenberger, G., & Pahl-Wostl, C. (1998). The personal CO2 calculator – A modelling tool for participatory integrated assessment methods. *Environmental Modelling and Assessment, 1*, 1–12.

Sluijs, van der (1996). *Integrated assessment models and the mana gement of uncertainty*. IIASA working paper No. WP 96–119, IIASA, Austria.

Sorensen, J. (1997). National and international efforts at integrated coastal management: Definitions, achievements, and lessons. *Coastal Management, 1*, 3–41.

Sterman, J. D. & Sweeney, L. B. (2007). Understanding public complacency about climate change: Adults' mental models of climate change violate conservation of matter. *Climatic Change, 3–4*, 213–238.

Toth, F. L. & Hizsnyik, E. (1998). Integrated environmental assessment: Evolution and applications. *Environmental Modelling and Assessment, 3*, 193–207.

UNEP (1999). *Global environmental outlook 2000*. UNEP's Millennium Report on the Environment. London.

World Water Commission (2000). *A water secur e world. V ision for water, life and the en viron-ment*. World Water Vision Commission Report, Marseille/Montpellier, France.

Welp, M. (1999). Defining integrated coastal management for the Baltic Sea Region. In L. Hedegaard & B. Lindström (Eds.), *The NEBI yearbook 1999: North Eur opean and Baltic Sea inte gration*. Berlin: Springer.

Welp, M., de la Vega-Leinert, A. C., Stoll-Kleemann, S., & Fürstenau, C. (2006). Science-based stakeholder dialogues in climate change research. In S. Stoll-Kleemann & M. Welp (Eds.), *Stakeholder dialo gues in natur al r esources mana gement. Theory and pr actice*. Berlin/ Heidelberg: Springer.

Welp, M., de la Vega-Leinert, A. C., Stoll-Kleemann, S., & Jaeger, C. C. (2006). Science-based stakeholder dialogues: Tools and theories. *Global Environmental Change, 2*, 170–181.

Weyant, J., Davidson, O., Dowlatabadi, H., Edmonds, J., & Grubb, M. (1996). Integrated assessment of climate change: An overview and comparison of approaches and results. In J. Bruce, H. Lee, & E. Haites (Eds.), *Economic and social dimensions of climate c hange*. Cambridge: IPCC, Cambridge University Press.

Wynne, B. (1996). May the sheep safely graze? A reflexive view of the expert-lay knowledge divide. In S. Lash, B. Szerszynski, & B. Wynne (Eds.), *Risk, en vironment & modernity . Towards a new ecology*. London: Sage.

Chapter 3
The Use of Focus Groups in Assessing Ethnic and Racial Group Concerns About Nuclear Waste Cleanup

Angela C. Halfacre

3.1 Introduction

A lack of confidence and widespread distrust in US government institutions has led policy-makers in this country to experiment with new approaches to incorporate citizen participation in their policy decisions. These experiments reflect the idea that the relationship between government and the governed should be one of collaborative decision-making; "communicating *with* rather than *to* the public is more likely to meet public expectations" (Beierle & Cayford, 2002; Bradbury, 1994: 363; Hester, 2006; see Koontz & Thomas, 2007 for an overview).[1] The absence of citizen input can hinder the implementation of laws and subsequently, produce increased litigation over agency decisions. For effective policy-making, agencies increasingly attempt to include citizen views in the development, implementation, and evaluation of policies.

Ethnic and racial minority and low-income groups concerns about environmental risk and their impressions that their viewpoints are not being represented in the political and societal arenas sparked the emergence of the US Environmental Justice Movement in the last 30 years. A variety of governmental agencies, such as the Environmental Protection Agency, have incorporated environmental justice principles in their agency protocols for environmental evaluation and decision-making. Environmental justice includes the equal distribution of environmental risk, but some research indicates that in the United States there are several instances of environmental injustice, even racism, with regard to risk exposure. Considering many agencies' concerns about environmental justice, these governmental departments are attempting to include further citizens in the policy-making process to

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[1]Creighton traces the evolution of the relationship between citizens and government agencies: a procedural relationship marked the 1960s and 1970s. In the 1980s, the public desired more meaningful involvement. The 1990s' ideal is "collaborative decision-making" (Creighton cited in Bradbury, 1994).

F.H.J.M. Coenen (ed.), *Public Participation and Better Environmental Decisions*,

address the historic problems surrounding risk communication. Central to the issue of risk communication is understanding the diversity of the audiences confronting environmental problems. By understanding differences in risk perception across groups and then effectively communicating to diverse audiences, policy-makers are more likely to receive helpful feedback on their approach and react to that feedback. Thus, policy-makers can better move towards creating legitimate and efficient two-way communication between themselves and the public. In this chapter, we analyse focus group data collected at former nuclear weapons facilities to assess differences and similarities among ethnic and racial groups.

If any policy problem has warranted strong public participation across ethnic and racial groups, it is the cleanup of the Department of Energy (DOE) nuclear weapons facilities across the United States. The cost of the environmental cleanup at all DOE sites is estimated as high as $1 trillion over 75 years (Veiluva, 1996). Complete environmental restoration of DOE sites is unlikely to be economically feasible; thus, public input is important in determination of cleanup priorities (US Department of Energy, 1995). Despite the need for a dialogue among government agencies, experts, and the public (Bradbury, 1994; Hadden, 1991; Heiman, 1999; Mitchell, Thomas, & Cutter, 1999; Slovic, 1987), effective communication has been difficult. Further, there is little public consensus about what is more or less risky. To better understand public views, the Department of Energy charged an outside consulting group to collect focus group data from citizens living near six former nuclear weapons facilities (Fernald, Idaho National Engineering Lab, Hanford, Oak Ridge, Rocky Flats, and Savannah River Site). Key to this data collection effort was the emphasis on interviewing traditionally under-represented citizens (minority and low income groups) to assess their views about environmental risks associated with the sites and their clean up.

The focus group approach utilised in this study and the results discussed in this chapter could be important to guide future public agency public involvement in decision-making surrounding controversial and problematic environmental hazard mitigation. This focus group approach differs from the more traditional public hearing and public comment methods of collecting and assessing public sentiment. The use of focus groups – often in conjunction with more traditional methods – allows the governmental agency to assess the concerns of a particular cohort, especially those cohorts that feel that their voices are seldom heard within public forums. The use of focus groups can likely allow these traditionally under-represented citizens to be more involved in the political decision-making process.

3.2 Local Residents and Environmental Risk Perceptions

Risks of various kinds confront us daily, although an increasing amount of evidence indicates that minority populations, similar to those included in our focus groups, are likely to believe that they may be consistently exposed to more environmental hazards than the majority population even if evidence is inconclusive (Ash & Fetter, 2004; Atlas, 2002; Bullard, 1990; Downey, 2003, 2006; Mennis, 2002; Mohai &

Saha, 2006; Morello-Frosch, Pastor, & Sadd, 2001; Pastor, Sadd, & Hipp, 2001; Pollock & Vittes, 1995; Stretesky & Hogan, 1998; Yandle & Burton, 1996;). The growing concern about environmental risk among America's ethnic and minority populations poses several important issues for experts and public officials, such as DOE's leadership and its nuclear weapons site managers, involved in the control or elimination of these risks. For the scientists and other professionals concerned with environmental risk assessment and management, a major challenge has been to verify the existence and extent of such exposure. For policy-makers and other involved public officials, another challenge has been to understand the origins and magnitude of this belief in order to make effective and appropriate responses to these perceptions.

In light of growing scientific and political concern about the environmental risks to which ethnic and minority populations may be exposed, surprisingly few researchers have empirically investigated how perceptions of environmental risk may differ among specific racial and ethnic groups, or have explored the implications for public policy-making at the DOE sites or elsewhere.

The focus group approach and findings discussed in this chapter provide an opportunity to enrich the current understanding of minority risk perception in several respects. These focus groups enable us to explore how proximity to environmental hazards, and possible exposure to hazards affect risk perception and related attitudes among several different, and carefully differentiated, ethnic and racial minorities. Specifically, this chapter describes the expressed concern about environmental risk of four racial or ethnic groups – three of which are minority groups – living near the six DOE nuclear weapons facilities.

This chapter explores how exposure to environmental risk, as well as cultural and social factors, appear to affect perceptions of environmental hazards and thereby addresses some of the limitations of previous studies. The primary analytical technique involved is content analysis performed on the recorded discussions of 29 focus groups composed of African-American, Asian-American, Latino, and White individuals living near the DOE sites.

3.3 Minority Risk Perception: Theory and General Findings

Public agencies and scholars are interested in minorities perception of environmental risk, and this concern inevitably leads to a consideration of the social and psychological origins of these beliefs. The most obvious political reasons are that DOE and other policy-makers must understand citizen concerns related to environmental cleanup at the weapons sites if they are to communicate information about hazards clearly and credibly and to craft policies responsive to public concerns. This implies an understanding not only of what is perceived but also of how and why such perceptions arise. In short, policy-makers must look beyond 'objective' characterisations of risk – the sort of technical and scientific underpinning of most professional risk analysis – to understand the origin of minority perceptions

about those risks. Through this process, decision-making can improve due to the high quality identification and understanding of specific risk concerns across populations.

This view of risk perception as a social and psychological process is especially important in light of the widespread public distrust toward DOE risk communicators, for it seems evident from our study, as well as from many others, that this public distrust arises from complex antecedent social and psychological circumstances. It seems especially important to ask if these minorities respond in distinctive ways to hazards and to communications about these hazards, and, if so, for what apparent reasons? And what kinds of differences might be considered typical? To address these issues, we need a conceptual framework. Among scholars concerned with the origins of individual perceptions and attitudes about environmental risk, one currently important set of scholars emphasise the importance of cultural processes in shaping – and possibility differentiating – group cognitions about risk. We believe that this approach, which we describe as a theoretical 'lens' to study individual and group attitudes about risk, provides a particularly illuminating framework for exploring minority concern about environmental risk at the DOE sites. Through this framework, policy-makers are more likely to comprehend risk perceptions across groups and make better choices regarding the prioritisations or hazard clean up and promote collaborative, legitimate, and effective decision-making.

Studies documenting differences between experts and the public suggest that public concern over environmental risk varies. During the last decades, the work of Douglas and Wildavsky (1982) has made scholars more attentive to the cultural and social aspects of public risk perception. Douglas and Wildavsky argued that people assess risks on the basis of the threat they pose to cherished values and beliefs. People do not focus on risks "simply… to protect health, safety, or the environment. The choice reflects… [a society's] beliefs about values, social institutions, nature, and moral behaviour. Risks are exaggerated or minimized according to the social, cultural, and moral acceptability of the underlying activities" (Covello & Johnson, 1987: viii). Understanding risks in this way moves scholars beyond assessing the rationality of individual self-interest by asking, for instance, if these perceptions are 'objectively' justified. It is especially useful when studying different societies or cultures and, more specifically, in studying differing cultural groups within a society. For example:

> [S]lipping and falling on the ice … is a game for young children, but a potentially fatal accident for an old person. And the probability of such an event is influenced both by person's perception of the probability, and by whether they see it as fun or dangerous. For example, because old people see the risk of slipping on an icy road to be high, they take avoiding action, thereby reducing the probability. Young people slipping on and sliding on the ice, and old people striving to do the same, belong to separate and distinct cultures. They construct reality out of their experience of it. They see the world differently and behave differently; they tend to associate with kindred spirits, who reinforce their distinctive perspectives on reality in general and risk in particular. (Adams, 1995: 9)

Age is not the only variable that influences a group's or an individual's construction of reality and risk. Although some fragmentary, tentative evidence has suggested

the public perceptions of risk and environmental concerns relate to such social and cultural variables, as race, ethnicity, and gender (e.g. Vaughan, 1995a, b), more study is needed. Scholars have not carefully documented or explicated risk perception differences among distinct ethnic and racial groups "because few systematic and detailed studies have been conducted on environmental risk perceptions and ethnicity, available data only allow for speculations as to how variations in the relationship between ethnicity and judgments have been summarised previously" (Halfacre, McCarthy, Burkett, & Cavarjal, 2006; Vaughan & Nordenstam, 1991: 51). A greater understanding of the social and cultural aspects of risk is needed, but this does not diminish the importance of psychological or cognitive variables. Individuals view risk through their own psychological lenses; the relevance of this cannot be understated. Still, understanding can be considerably enriched and amplified by exploring in greater detail and social breadth how different ethnic and racial groups view environmental risk.

The survey research approach that predominates in risk perception study has several methodological limitations. Telephone surveys are inherently limited in gaining information about minority perceptions of environmental risk; some surveys have low minority response rates and are hindered by an absence of phones in many low-income households (Lavrakas, 1993). Flynn and his colleagues' (1994) response rate was comparatively good, but still only 50.7%. Additionally, their sample size is not large enough to disaggregate the non-white category. Savage (1993) only included African-Americans and whites. There are other problems in these studies. For instance, those in the Flynn study were non-white *English* speakers indicating that the minorities interviewed were not representative of many non-whites in the United States.

Focus group data eliminates the problem of imposing a specific definition of risk perception or environmental concern onto the subjects, as survey research tends to do. The focus group format allows respondents to develop and explain their views about risk and the environment. Further, problems associated with grouping minorities together are alleviated because of the specific structure of the focus groups (which were broken down by race and ethnicity). Further, these data provide several testable hypotheses for future research.

3.4 The Consortium for Environmental Risk Evaluation (CERE) Study

The US Department of Energy (DOE), long burdened by a history of secrecy and deception, has recently made attempts to expand public participation in the process of cleaning up nuclear weapons facilities. Instructed by Congress to produce a report about the health and safety risks, the DOE contracted with the Consortium for Environmental Risk Evaluation (CERE) to study the six most environmentally degraded former nuclear weapons facilities (CERE, 1995). These

six sites appear to pose the greatest threat to public health and safety: Hanford Site (Richland, Washington), Savannah River Site (Aiken, South Carolina), Oak Ridge Reservation (Oak Ridge, Tennessee), Rocky Flats Environmental Technology Site (Golden, Colorado), Idaho National Engineering Lab, and Fernald Environmental Management Program (Fernald, Ohio).

The CERE study had two components: it provided an expert assessment of risks as well as a report on public concerns about those risks. Documenting public concerns was central to the project because, "in many cases, the most vexing problems cannot be addressed solely by science but will require a broad-base and informed public debate" (US Department of Energy, 1995: 86). The study's public concern component provided a wealth of focus group interview data with the potential to illuminate differences among groups in their level of concern about environmental risk and trust in potential risk communicators.

In keeping with the DOE's new mission, CERE went beyond the conventional public hearing format and characterised the concerns of local communities around the nuclear weapons facilities. At all the sites selected for study, CERE conducted focus groups. CERE did something else unconventional: it targeted traditionally under-represented groups including minorities and lower income individuals who have historically had limited, if any voice, in the political process. Almost one-third of the total number of focus groups contained individuals drawn exclusively from members of traditionally under-represented groups and those 'disproportionately effected' by the DOE site. These groups were African-Americans, Asian-Americans, Latinos, Native Americans, downwind (in relation to the site) Whites, and downgradient (in relation to the site) Whites.

The focus group data used in this study offer a unique opportunity to assess this approach and whether different ethnic and racial groups vary in their concerns about environmental risk. Previous studies have largely depended on survey research to explore similar questions. In focus groups, the interaction between participants illuminates the logic and assumptions of the respondents; interaction allows individuals time to rethink positions, arguments, and opinions. Many times in the focus groups analysed in this chapter, participants would agree with other participants' statements, or even rethink their own and other's arguments. Focus groups reveal citizens' viewpoints and the reasons why they think the way they do. The use of focus group data allows participants to emerge from the scholarship with their own voices intact.

Focus groups are "especially useful when working with categories of people who have historically had limited power and influence" (Morgan & Krueger, 1993: 15). Focus group sessions provide a secure environment for discussants to express their concerns. The focus group method empowers individuals to express themselves freely, and expand upon points and arguments. This 'empowering' is important for individuals from marginalised groups who may not feel confident in expressing their opinions.

In Chapter 1 in this book a focus group is defined as being comprised of (1) a small group (5–12 members), (2) representative of the public, and (3) having free discussion on a general topic with little direction from the facilitator. The focus

groups analysed in this chapter were designed to tease out information from minority individuals who may feel marginalised. Thus, while all groups were from 5 to 12 members, these the individuals targeted were representative of ethnic and racial groups living near former nuclear weapons facilities. Further, the facilitator was required to be more specific in directing initial discussions through the use of standard questions and probes to encourage greater discussion from populations, as mentioned above, not likely to feel confident in voicing their concerns and views.

3.4.1 Methodology

This study utilises content analysis to examine the focus group interview discussions. Content analysis uses a set of guidelines to form valid judgments about discussion (Berg, 2004; Weber, 1990). In content analysis, we employed systematic and objective recording and counting techniques to quantitatively represent a text's semiotic significance.[2] Researchers using this method often include a qualitative evaluation of the content (Neuman, 1994: 262). In this study, we examined each of the 29 focus groups with the end result being a number of 'mentions' of which different groups trusted. We created a coding scheme following Weber's method. The unit of analysis was each mention of a source of trust. By allowing respondents in the focus groups to name their trustworthy sources – rather than reselecting potential sources as would be done in survey research – these data are ideal to explore differences and similarities among ethnic and racial groups. The use of an open-ended question (one of the attractions of the focus group approach) encourages the richness of response usually unavailable from traditional survey research. Furthermore, this format makes it clear whether respondents understand trust in the same way. Through the content analysis of the focus group data, frequency of mentions of trust are compared. Further, evaluation of the comments is also included throughout this paper.

3.4.2 Analysing Ethnic and Racial Risk Concerns at the DOE Sites

In each CERE focus group interviewed, the moderator was instructed to ask 27 similar questions with subsequent probes. These focus group participants were drawn from a random sample by postal zip code surrounding the site. Participants were asked a range of questions starting with broad social issues and the quality of the environment, then narrowing to environmental risks associated with a particular nuclear weapons facility.

[2] Content analysis has been used to determine who wrote each paper in *The Federalist Papers* and, more recently, to analyze President Bill Clinton's sworn depositions (Leen & Adams, 1998).

Fifteen of the 27 questions in the focus group protocol are used in Table 3.1. These 15 questions specifically dealt with environmental quality and the risks from the sites. For example, participants were asked, “Does this area have much air pollution?” followed by probes such as “What evidence of air pollution do you see, or what leads you to believe that there is not much?” Among the focus groups, those involving groups traditionally under-represented in the political process – minorities and lower income individuals – as well as white comparison groups are included in this portion of the analysis.[3]

Content analysis applied to several focus group discussions determines the relationship between minority status and risk perception. Specifically, the number of ‘mentions’ of risk perception or concern about environmental risk characterises each focus group. All 29 groups – each exclusively composed of either African-Americans, Asian-Americans, Latinos, or whites – were used in the content analysis. All groups together numbered 283 participants. Eleven of the 13 white groups were constituted from downgradient individuals or downwinders. One of the remaining two groups was simply categorised as white (i.e., not downgradient or downwinder); the other as Appalachian (a regionally based category). This is an important point because the downwinder and downgradient white groups are likely to have been exposed to more risks than the rest of the white population in the United States. The composition of the minority focus groups did not necessarily include downwinder or downgradient individuals (the minority focus groups were selected on the basis of minority status and zip code). These selected individuals lived near the site, but not necessarily downwind or downgradient to it. All whites

Table 3.1 Mention of environmental risk concerns: by ethnic or racial group[a] (column percents (Col. %) are in bold)

	Whites		African-Americans		Asian-Americans		Latinos		All groups
	[13 groups 124 people]		[6 groups 62 people]		[5 groups 42 people]		[5 groups 51 people]		[29 groups 283 people]
	N	**Col. %**	N	**Col. %**	N	**Col. %**	N	**Col. %**	N
Do not know	22	**2**[b]	23	**4**	15	**3**	19	**4**	79
Not concerned	124	**11**	49	**9**	24	**5**	53	**12**	250
Slightly concerned	206	**18**	80	**15**	118	**25**	179	**40**	583
General concern	532	**46**	293	**54**	191	**40**	131	**29**	1,147
Personal concern	189	**17**	85	**16**	95	**20**	59	**13**	428
Action concern	70	**6**	12	**2**	31	**7**	10	**2**	123
TOTALS	1,143		542		474		451		2,610

[a] Responses to 15 of the 27 questions asked in all focus groups analysed here were coded. These questions dealt with environmental quality and possible risks from the sites.
[b] Due to rounding error, column percent totals may not equal 100%.

[3] All the coding was conducted by the author. Six of the 29 focus groups were chosen randomly and checked for reliability by two other individuals. Coding for risk perception received an inter-coder reliability coefficient of 86.4%.

included in the study lived downgradient or downwind to the site versus minority populations which may or may not have been directly downgradient or downwind to the site. Thus, differences between whites and minorities may also be due to whether the individuals are either downwind or downgradient to the site.

Table 3.1 categorises respondent mentions of environmental concern or perceptions of environmental risk by ethnic or racial group. The first column identifies different categories of concern about environmental risk. The category 'Do Not Know' includes statements of respondent uncertainty or inability to answer questions due to lack of information. 'Not Concerned' includes statements of unconcern about environmental quality or risks from the sites. The category 'Slightly Concerned' involves statements of mild or qualified concern. 'General Concern' is concern without qualifiers. The category 'Personal Concern' includes comments about the respondent or individuals the respondent knows (e.g., parents, children, friends, or neighbours). 'Action Concern' reflects a change in behaviour. For example, a respondent now drinks bottled water because he or she is fearful of possible contamination from the site.

Table 3.1 provides the raw number of mentions as well as the percentage of total mentions per group (column percents). For example, African-Americans mentioned a general concern 293 times, 54% of their total mentions. Column percents allow comparisons across all ethnic and racial groups and, additionally, capture variations in ethnic and racial groups not illuminated when they are aggregated into 'non-whites.' In this respect, the comparisons are especially interesting. Existing literature has largely ignored Asian-American concerns about environmental risk and offers relatively little information about Latino risk perceptions. These deficiencies, in turn, have largely precluded opportunities to compare these significant population groups with each other and with African-American concerns about environmental risk in a common setting. Table 3.2 reports the same findings as Table 3.1, but summarises these findings by low, medium, and high categories.

Three differences emerging from Tables 3.1 and 3.2 deserve special mention. First, perhaps the most important inference is that African-Americans have the highest percentage of 'general concern' statements. Second, whites and Asian-Americans

Table 3.2 Risk perceptions compared: the major risk perception variables among the CERE focus groups[a]

	Whites	African-Americans	Asian-Americans	Latinos
Risk uncertainty (Do not know)	Low	High	Medium	High
Lack of concern (Not concerned)	Medium	Medium	Low	High
Limited concern (Slightly concerned)	Medium	Low	Medium	High
General concern	Medium	High	Medium	Low
Personal concern	Medium	Medium	High	Low
Action concern	High	Low	High	Low

[a] High = Greater than 25% above the mean number of mentions across all groups; Medium = Between 25% below and 25% above the mean number of mentions across all groups; Low = Less than 25% below the mean number of mentions across all groups.

both had significantly more mentions of 'action concern' than either African-Americans or Latinos. In particular, and contrary to what one might suppose, expressions of concern *related to action* is least prevalent among African-Americans – the group most likely to mention a general concern. Finally, Latinos in the study seem surprisingly nonchalant, or largely indifferent, about environmental risk when compared to the other minorities in terms of the frequency with which the various groups expressed 'slight,' or 'no concern' to the interviewers. A closer look illustrates that within each category of environmental concern are many nuances among ethnic and racial group risk perception. Here, the qualitative content analysis particularly enhances characterisation and contrast in group perceptions and thereby exemplifies the richness and detail of participant responses captured with focus group techniques. In the following sections, the results of the content analysis of the focus group data are reported by risk perception category.

3.4.2.1 'I Do Not Know': Uncertainty About Environmental Risk

Considering the veil of secrecy surrounding the DOE sites until quite recently, it makes sense that some individuals would feel that they have insufficient information to assess environmental risk. Moreover, since education level also affects risk perceptions, one expects that 'non-white' respondents, in particular African-Americans and Latinos, may be more likely to reply to questions of risk with 'I do not know' due to possibly reduced access to technological information.

Whites are least likely to mention uncertainty about risk while African-Americans and Latinos are the most likely. One participant's comments in one of the African-American groups from the Savannah River Site typifies responses to questions about the nuclear weapons facilities: "I don't know enough about it." Although similar statements were made in the majority of the focus groups, these comments were more prevalent in the African-American and Latino groups.

3.4.2.2 'I Am Not Worried': Lack of Concern About Environmental Risk

Claiming to be unconcerned about environmental risk may indicate something beyond indifference; it could mean that the respondent feels an absence of knowledge or power to manage these risks (Vaughan, 1993). By this logic, one might expect that non-whites would mention unconcern as a coping mechanism more often than whites. As expected, African-Americans and Latinos did express unconcern about risks more often than whites. Not so obviously, Asian-Americans, unlike the other non-white groups, express varying levels of environmental concern.

A common response indicating an apparent unconcern, or an inability to articulate it, related to eating fish caught in the area of DOE sites. One Latino male's comments about the INEL site are illustrative:

Moderator: Let me ask that, who here fishes?
Man: Me, everyday.

Moderator: Okay. Can I see a show of hands? Okay. Ya'll fish. So then there's some people who do get out to the waters and stuff. Let me ask, do you catch the fish, or do you eat the fish that you catch?
Man: I do.

Other reasons beyond indifference could possibly explain lack of concern. As mentioned above, some scholars argue that those who do not have a sense of control about their own lives disregard risks to which they are exposed as a coping mechanism. Alternatively, lack of concern may also stem from the belief that one does not confront a situation involving significant risk. Another INEL Latino male's response to a question about pollution may reflect either avoidance or confidence:

Moderator: If you had to name the most important source of pollution in your community?
Man: *I live very content and happy* . [Italics indicates translation from Spanish.]

Here, the respondent addresses a question about his environment with a statement about his person. This participant's response may stem from genuine indifference, or evading the question may be a plausible strategy for coping with concerns about environmental risk. Other participants directly stated that they did not want to know more about these risks. One woman from the same Latino group declared: "Do you tell your husband everything that goes on? I mean, I think we're getting ridiculous thinking that the Government has to tell us everything. I think that we are better off knowing less." When asked if he wanted to have more information about INEL, a Latino man stated, "we don't need it, the less you know, the less you worry about." Lack of control could explain why African-Americans and Latinos so often mentioned unconcern about risks from the sites. This mirrors findings of other scholars such as Vaughan (1993, 1995a).

3.4.2.3 'I Am Somewhat Worried': Limited Concern About Environmental Risk

Those exhibiting limited concern essentially see two sides of the coin. They are concerned, but it is not of great importance to them, or they believe current conditions are an improvement. Latinos have considerably fewer mentions of general concern, but they have significantly larger number of mentions of 'slightly concerned' than any other ethnic or racial group.

For example, after describing the site and its operations, the moderator asked the participants how serious they thought the waste problems were with Rocky Flats. A Latino woman responds that she "would imagine the most serious damage has been done in the early '50s, '60s, when they didn't know what they were dealing with. Now, at this point, we can just assume and hope that they are cleaning it up the best ways they can."

Several Georgia respondents mentioned the Savannah River Site (SRS) as one of their concerns. The moderator, as a follow-up to these statements, asked if these

concerns were "current concern[s] about pollution from the site, or from years past?" One Asian-American male respondent indicates only slight concern because he viewed the situation relative to private industry: "The main problem with SRS – I'm trying to find out more about that place out there, because possibly in the next few years I'd like to get a job out there, maybe, in the Environmental Department. However, the problem with most nuclear facilities is that the view of secrecy, you know, it just causes doubts. It just – there's some bad thing going on, because they won't tell us about it. And in the last two years they have been allowing more people out there. I've taken a tour out there, and they're a lot safer than private industry. There are at least twice as many managers out there than any other private industry would have because our tax dollars are paying for all this."

As illustrated by the preceding quotation, although moderated concern was most prevalent among Latinos, it was also evident to a lesser degree among Asian-Americans and whites. Further, as indicated by the willingness of the African-American male to work at SRS quoted here, attitudes toward the economic benefits of facilities could also be important in characterising risk perceptions. In most cases, and in particular at the SRS, significant economic benefit (e.g., jobs, funding for services and promoting other activity) has resulted from the presence of such a significant employer and activity in a largely rural community.

3.4.2.4 'I Am Worried': General Concern About Environmental Risk

Although some studies find non-whites to be unconcerned about risk (as discussed above), other survey research studies lead one to expect non-whites to exhibit higher levels of general concern than whites (Flynn, Slovic, & Mertz, 1994; Savage, 1993). The authors of one such study argue that those who do not feel they have control over risks to which they are exposed have more concern about those risks; the researchers contend "perhaps … non-white[s] … see the world as more dangerous because they have less power and control" (Flynn et al., 1994: 1107). African-Americans did mention a general concern more frequently than whites, but Latinos did not and Asian-Americans respond similarly to whites.

Every group gave some evidence of general concern. When asked if there was anything of concern about Oak Ridge, one Asian-American woman responded: "I think about cancer. I heard from my husband that if you live in a sixty-mile radius then you'll get cancer. It just concerns me because in my country, very rarely people die of cancer. And I'm thinking I live here in Maryville and it's a thirty minute drive [to Oak Ridge]." Asian-Americans tend to mention this kind of concern about as often as the total focus group average while African-Americans mention it more often than any other group.

The following exchange from a Savannah River Site African-American group illustrates this greater incidence of expressed concern:

Moderator: How serious do you think the problems are with the wastes at the Savannah River site? Any specific chemicals, materials, substances

that you are concerned about out there? How do you compare these problems with other places with problems?

Man: They are very serious about it. Anytime you have a nuclear reactor you have that water which has radiation in it and they can't dispose of it. They can bury it and they usually tried to build those deep holes and they're layered with concrete and other sorts of things that keep it from seeping back into the environment, but it doesn't do very well, so they are still housing it trying to find some way to dispose of it. The water that has radiation in it.

Woman: I think it's a very serious problem because it keeps appearing in our newspapers and on the news and stuff about the water problems and the sewerage and stuff.

Woman: I don't understand it.

Man: I think it is a serious problem because that water comes down from Aiken, that plant down there in Aiken comes down the Savannah River and that's the water that we are using. I think that's very serious. But I don't know what they are doing about it.

Woman: I think it serious, but I don't know.

Woman: There's a problem, but it seems that nobody is doing anything about it.

While this conversation involves some expressions of uncertainty, the prevalent feeling is that the risks from the sites are serious and need further attention. Other comments in the same group also indicate disagreement in the level of seriousness involved:

Moderator: How do you compare what we do know of the problems with other parts of the country? How would you compare the problems out there [at SRS] with other local problems?

Woman: This one is minute to others.

Moderator: Savannah River is minute compared to other local problems. Is this a common consent?

Woman: No.

Man: If you have radiation in the water and you can't dispose of it, it's a very, very serious problem. The radiation will kill each and every one of us in here if we get too close to it. That's a very, very serious problem. We were talking about how it gets into the water. The EPA and the environmental people are saying it don't supposed to get in the water, but it's still showing up in the water and we're still consuming mercury and lead from those leaks that the Savannah River plant has. It's no different from this one than that Love Canal. When you have a nuclear site and you are making weapon grade plutonium for weapons and what not, you have a lot of wastes or a lot of residuals that you need to dispose of that humans can't come in contact with. And when you have things like that that you can't put in the ground because it'll come back up and you can't drop it in the sea because it'll contaminate the sea and you just got it sitting here on

the shelf, that's a serious problem. You got to get rid of it some way and they don't know how to get rid of it.

Moderator: How do you compare these problems with other local problems?

Man: I think that's one of the major [problems, what is] in the water. I see brothers there's a bridge right before you get to the Savannah, and I see brothers all the time fishing right over the bridge. And they are pouring in right in there and it's contaminated the fish and the brother are fishing and they're taking it right home.

Woman: It's a very serious problem because the media keeps resurfacing the problem and I think this is just an act to buy more time. They keep saying to the public, I hear you, I hear you, I hear you, I'll keep putting this stuff in the paper showing you that I hear you but then you never hear anything happening from the resurfacing of the problem being restated over and over. So something needs to be done.

The general implication of the collective focus group data is that the risks at these sites concern all groups, but African-Americans exhibit a greater level of apprehension. A possible explanation for this greater concern when compared with other groups is that it might, as an earlier study observed, demonstrate the "black's more widespread scepticism, powerlessness, and pessimism, which emanate from a lack of significant gains in life situation, with little prospect for immediate improvement" (Turner & Kiecolt, 1984: 677).

3.4.2.5 'I Am Worried for My Family': Personal Concern About Environmental Risk

Personal concerns involved mention of risk to specific individuals the respondents know (e.g., friends, family, neighbours, or self). Asian-Americans have the most and Latinos have the least percentage of mentions in this category. The moderator of the Hanford Asian-American group asked the respondents if they knew any workers on the job who might have been exposed to something harmful to their health. One woman knew of two individuals: "I know two friends. One is my sister's father-in-law, one is my friend's best friend. They both [died] of cancer. Real bad cancer. From the time the doctor predicted that he knows he has cancer, he has about two months, he died in a lot of pain. Awful pain. And then the friend just passed away just five years ago. The same Hanford]. They both die of cancer. Then the one, the friend that just passed away a few years ago, lately his wife got a call from an attorney hired by some company in California. Asked her, "Do you mind if I dig up your husband's body to find if his death is related to the radio waves in Hanford area?" His wife said, "No, don't dig up, let bygones be bygones." "But you might get a million dollars, and she say forget about the money, it's not going to do me any good. What is gone is gone, you know. So I think, the wife says, nobody knows if the two deaths are related to the air waves. But nobody try to find out any direct reasons to that."

This woman's comments indicate that even though her friends suspect radiation from Hanford to be the cause of two deaths in their community these individuals, they did not take any formal actions to assess responsibility for these deaths. This inaction could represent more than letting 'bygones be bygones;' it also indicates that these individuals do not think that even if they did want to pursue a lawsuit against the Hanford management (Westinghouse) would not have to assume responsibility for these deaths.

When asked "Do you know of anybody … [who has] been, in your neighborhood, in your community who's been affected by any kind of pollution?" one African-American man from Oak Ridge cited an example involving a close family member:

Man: It might have been a year ago, or whatever, but our family feel strongly that my father was killed by pollution.
Moderator: What kind of pollution?
Man: Exposure. He was supposedly either first, or second of black – put in the chemical of operating that 112 [Oak Ridge plant]. He was either the first or second one. And he was 29-years-old, dropped dead, and hadn't been able to get – find out what the autopsy said, or whatever he was in the process of suing for, contamination. The lawyers, way long ago and all this stuff. This is the stuff I've just come into within the past year or two. That is my family's strong opinion. I've talked to his sister, who's 83-years-old, and the rest of the family.

Previous studies pinpoint personal concern (or personal exposure risk perception) as a significant form of risk perception (Slovic, Fischhoff, & Lichtenstein, 1985). Concern mediated through personal acquaintances has an important impact on the perceptions of the individuals in this study. This is possibly a particularly salient finding for policy-makers struggling with the selection of the appropriate risk communicator for different publics. In the exchange above, this African-American man discusses his views in terms of a collective family view; this suggests the importance of group relationships in shaping such perceptions.

3.4.2.6 'I Was So Worried, I Moved': Taking Action Because of Environmental Risk

Many studies have documented that risk perception can lead to actions based on environmental concern (e.g., participation in environmental groups or lifestyle changes). In particular, some studies compare white and African-American participation in environmental activities according to their level of concern. Mohai (1990) finds that environmental concern is similar for whites and African-Americans, but the results of this concern (e.g., 'environmental' activities) are more likely to be seen in white populations. Although this trend may be changing with the emergence of the Environmental Justice Movement (EJM), one would still expect whites to respond more actively to their perception of environmental risk because of the continuing dominance of whites in these types of activities.

In this analysis, whites and Asian-Americans both have higher percentages of action responses than either African-Americans or Latinos. Action based on these environmental concerns involved varied responses including drinking bottled rather than tap water, refusing to eat fish and game, and relocating. One male white downwinder now buys bottled water because of his close proximity to Fernald:

Moderator: Do any of you have concerns about the water you consume at your home? Are there any problems with the quality of your water; and where does it come from? Is it a City system? Is it a well? We may have a variety.

Man: I don't live very far from Fernald and ever since we found out about Fernald and what was going on there and so forth, we've been buying our water; and that's been many years – I guess, five, six, seven years.

Other individuals changed their habits as well, as this exchange between white downgradient rural participants from Oak Ridge portrays:

Man: I used to take my kids over swimming at Chester Cross Park, which is in Middle Valley, and I don't enjoy it anymore. The water is nasty over there, the swimming area.

Moderator: When you say "nasty" Roger?

Man: Well, there's a lot of –

Woman: You know what's wrong with it. It's pollution.

Afro-Americans stand out by expressing general concern at the same level as whites, but they were less likely to mention taking action based on those concerns. Thus, African-Americans seem to be deeply concerned about environmental risk, but for some reasons, may be unwilling or *unable* (e.g., due to financial or other constraints) to take steps to address these concerns (see Mohai, 1990). In some cases, the absence of action could indicate an absence of political power.

3.5 Conclusion: Ethnicity and the Perception of Environmental Threat

This study suggests that, along with more traditional methods (e.g., public hearings or surveys) for understanding public views on risk, there are other innovative methods such as focus groups that are useful in understanding citizen views. In particular, to illuminate minority concerns, the focus group data collection approach assists with some of the difficulties inherent with gaining feedback from individuals who have historically been less empowered. From a technical standpoint, focus groups address some of the difficulties in interviewing individuals who may not have telephones and feel uncomfortable expressing their views. Furthermore, disaggregation of non-white groups into ethnic and racial components reveals new and important information about concern over environmental risks-information relatively few

existing empirical studies of risk perception or environmental attitudes among minority groups have so far clarified.

The focus group interviews at the DOE sites appear to confirm some assumptions about ethnicity and risk perception, to contradict others, and to pose suggestive, and sometimes counter-intuitive, conclusions worthy of further, more tightly focused investigation. These focus group experiences speak to both the scholar concerned to understand the disciplinary or conceptual implications and the policy practitioner contending with the problems involved in risk management at the DOE sites or related challenges. It seems useful to look at the implications of these findings explicitly from both perspectives.

3.5.1 Ethnicity and Risk Perception

It is apparent from the focus group discussions that many believe that they are in some risk from environmental hazards from the DOE facilities. This is true for *both* white and non-white respondents. However, when these perceptions are disaggregated among the different groups and then further characterised by the content of such perception – and here the focus group methodology is particularly illuminating – it seems apparent that these risk perceptions differ qualitatively *among the different ethnic groups as well as between the ethnic and the white groups*.

These data analysed here suggests several important implications for the continuing study of the interaction between ethnicity and race. First, *among the focus group participants, ethnicity and race appears related not only to perceptions about the existence of environmental risk but also to how the magnitude and other qualities of that risk were interpreted*. The relationships illuminated by the focus group interviews appear to challenge much existing risk perception literature in several important respects: (a) ethnicity did not appear to be consistently associated with either high or low levels of environmental risk concern but varied, instead, among the different ethnic groups; (b) white and ethnic respondents did not appear to differ consistently or systematically in their risk perceptions when the two groups were compared; and (c) each ethnic group studied exhibited a different qualitative pattern of risk perception.

Second, *the African-American, Asian-American and Latino groups appeared to differ in their propensity to relate concern about risk to an active, appropriate response*. In particular: (a) Latinos appeared more unconcerned or uncertain about the existence or magnitude of environmental risk than any of the other groups (including Whites) and more passive in responding to such risks as were perceived; and (b) Afro-Americans appeared simultaneously more concerned about environmental risk and less likely to respond actively than the other. Asian-Americans as a group could be distinguished from the other ethnic focus groups in several characteristics of their risk perceptions.

Third, *the Asian-Americans' risk perceptions exhibit a distinctive perspective in contrast to the other minority groups, especially African-Americans*. This would

be significant, if only because it calls attention to possibly enduring attributes among one of the few ethnic groups virtually ignored by risk perception scholars and other experts. Moreover, the differences emerging from the interviews raise intriguing issues apparently worth more study: (a) the mediation of family and personal acquaintances seemed especially salient in the Asian-Americans' greater propensity to express a concern about risk and to respond actively to such concern when compared to the other minorities; and (b) Asian-Americans, more than the other minority participants, appeared to resemble whites in their propensity to relate concern about risk with an active response.

Finally, *while both the Latino and African-American gr oups appeared passive in their r esponses to r eal or alle ged en vironmental thr eats at the DOE sites, this inaction did not necessarily indicate a lac k of awar eness or concern about suc h risks*. Indeed, in this respect the two groups seemed to have different personalities: (a) African-Americans often expressed considerable general concern about risks associated with the DOE sites, but relatively seldom acted directly on those concerns; while (b) Latinos were as a rule not only passive in response to possible risks at the DOE sites, but quite often apparently unconcerned as well as uncertain about such possible risks. These contrasting modes of concern and action related to environmental risk, which can be characterised as 'positive- passive' (Afro-American) and 'negative-passive' (Latino), merit more attention for what they may reveal about underlying differences in ethnic and cultural influences upon risk perception.

In short, what the focus groups suggest is that ethnicity and race matters in many aspects of risk perception, that it matters in understanding differences between whites and minorities and among different minorities in their response to environmental remediation at the DOE sites, and that the differences raise important conceptual issues for scholars involved in risk research.

3.5.2 Risk, Ethnicity and Policy

The single most policy-relevant revelation from the group interviews is the pervasive belief in substantial environmental risks associated with the DOE sites. Among all the 29 focus groups, more than two-thirds of comments related to environmental risk at the weapons sites were characterised as a 'General,' 'Personal,' or 'Action' concern indicating an explicit association between a DOE site and a perceived risk or threat of significant proportions. These high-salience concerns, additionally, accounted for more than half of all expressions about site-related risks among Whites, African-Americans and Asian-Americans and almost half (44%) among the Latinos. These apprehensions, as noted earlier, did not necessarily translate into some related personal activity – indeed, cognition and action were often uncoupled and this poses a significant interpretative problem for policy-makers. In the absence of other relevant information, such inaction can be inscrutable. It would be understandable for site-related policy-makers to misinterpret the absence of risk-related activity among these minorities as evidence of indifference or ignorance about

the environmental risks at the sites. It might also be readily interpreted as implicit acquiescence with existing environmental management at the sites. Nonetheless, the conversations recorded among most of the focus group suggest rather emphatically that among many – perhaps most – participants this concern, however inarticulate, was latent and apparently durable.

The pervasive latency of risk concern among so many minority members also points to the importance of aggressive outreach efforts to involve these minorities in the process of site-level policy-making even when no overt evidence of discontent may be apparent. It is admittedly difficult to anticipate when, if ever, latent apprehension may escalate to direct political action but a potential is clearly present. Moreover, communication pathways crafted through the outreach efforts of policy-makers can be an effective deterrent to the development of insular, idiosyncratic risk perception cultures evolving in isolation from flows of current and accurate risk data. However, the cost to policy officials in reaching out to these cultures may be considerable when measured in time, resources and political uncertainties. There is no assurance that resources invested will necessarily yield a high political return in a better informed, more acquiescent or supportive minority community. In fact, the initial results may be more confrontational than congenial between risk managers and minorities. But given the often high levels of distrust toward DOE and other similar risk communicators suffusing minority risk perceptions at DOE sites, a failure to initiate such cross-cultural communication would seem pose even greater near- and long-term risks to site managers (Bowen, 2002; Heiman, 1996; Pulido, 2000; Szasz & Meuser, 1997).

Latinos pose an intriguing interpretative problem for policy specialists. The Latinos revealed a pervasive style of indifference and inaction about environmental risk that distinguish them collectively from the other focus groups interviewed. This collective nonchalance is the more interesting because most of the Latino respondents were drawn from populations living near the Hanford Reservation where a multitude of extremely serious, and often apparently intractable environmental problems have been nationally publicised for decades. Some scholars have asserted that these attitudes are a residue of the fatalism and disbelief in personal political efficacy frequently observed in American Latino culture, but these previous studies do not provide any conclusive findings regarding the effect of these beliefs may have on environmental risk perceptions (Turner & Kiecolt, 1984).

When communicating about environmental risk, policy-makers should take into account differences among and across publics such as those discussed in this chapter. Policy-makers can benefit from a better understanding, through focus group data collection and other innovative means, of how different segments of the public perceive risk. If racial and ethnic groups vary in their concern about environmental risk, implementing mechanisms to address these differences or similarities can affect the policy-making process in several ways. For example, the views of distinct ethnic and racial groups can effect how much and how credibly policy-makers can communicate with minority individuals. Minority preferences for specific policy solutions or risk management alternatives are likely determined by their views of environmental risk. Further, sources of information are important to identify across

groups. Clearly, there is no definitive level of concern about environmental risk across ethnic and racial groups. As a result, attempts to communicate risk information and engage affected communities in risk management – regardless of type of hazard – will require a carefully nuanced strategy responsive to the differences in how risk attitudes are formed, transmitted, and exchanged. To create sound policy, understanding risk perceptions and communications from all perspectives is the key. Without sensitivity and an understanding of the diversity of views about environmental hazards, answering the question 'What are we worried about?' remains unnecessarily elusive.

References

Adams, J. (1995). *Risk*. London: UCL.

Ash, M. & Fetter, T. R. (2004). Who lives on the wrong side of the environmental tracks? Evidence from the EPA's risk-screening environmental indicators model. *Social Science Quarterly, 85*, 441–462.

Atlas, M. (2002). Few and far between? An environmental equity analysis of the geographic distribution of hazardous waste generation. *Social Science Quarterly, 83*, 365–378.

Beierle, T. C. &. Cayford, J. (2002). *Democracy in practice: Public participation in environmental decisions*. Washington, DC: Resources for the Future.

Berg, B. L. (2004). *Qualitative research methods for the social sciences* . 5th ed., Boston, MA: Allyn & Bacon.

Bowen, W. (2002). An analytic review of environmental justice research: What do we really know. *Environmental Management, 29*, 3–15.

Bradbury, J. (1994). Risk communication in environmental restoration programs. *Risk Analysis, 14*, 357–363.

Bullard, R. D. (1990). *Dumping in Dixie: Race , class, and environmental quality*. Boulder, CO: Westview.

Consortium for Environmental Risk Evaluation (CERE) (1995). *Inventory of public concerns at the U.S. department of energy's nuclear weapons complex*. New Orleans, LA: CERE.

Covello, V. T. & Johnson, B. B. (1987). The social and cultural construction of risk: Issues, methods, and case studies. In V. T. Covello & B. B. Johnson (Eds.), *The social and cultural construction of risk*. Dordrecht, The Netherlands/Boston, MA: D. Reidel.

Douglas, M. & Wildavsky, A. (1982). *Risk and culture*. Berkeley, CA: University of California Press.

Downey, L. (2003). Spatial measurement, geography, and urban racial inequality. *Social Forces, 81*, 937–954.

Downey, L. (2006). Environmental racial inequality in Detroit. *Social Forces, 85*(2), 771–796.

Flynn, J., Slovic, P., & Mertz, C. K. (1994). Gender, race, and environmental health risks. *Risk Analysis, 14*, 1101–1108.

Hadden, S. (1991). Public perception of hazardous waste. *Risk Analysis, 11*, 47–57.

Halfacre, A., McCarthy, D., Burkett, T., & Cavarjal, A. (2006). Latino migrant farmworkers in lowcountry South Carolina: A demographic profile and an examination of pesticide risk perception and protection in two pilot case studies. *Human Organization, 65*(1), 55–71.

Heiman, M. (1996). Race, waste, and class: New perspectives on environmental justice. *Antipode, 28*(1), 111–121.

Hester, R. (2006). *Design for ecological democracy*. Cambridge, MA: MIT Press.

Koontz, T. M. & Thomas, C. W. (2007). What do we know and need to know about the environmental outcomes of collaborative management? *Public Administration Review*, December supplement, *66*, 111–121.

Lavrakas, P. J. (1993). *Telephone survey methods: Sampling, selection, and supervision*. Newbury Park, CA: Sage.
Leen, J. & Adams, L. (1998). What did he say and how did he say it? *The Washington Post Weekly Edition*, 4 May, *23*.
Mennis, J. (2002). Using geographic information systems to create and analyze statistical surfaces of population and risk for environmental justice analysis. *Social Science Quarterly, 83*, 281–297.
Mitchell, J. T., Thomas, D. S. K., & Cutter, S. L. (1999). Dumping in Dixie revisited: The evolution of environmental injustices in South Carolina. *Social Science Quarterly*, June *80*(2), 229–243.
Mohai, P. (1990). Black environmentalism. *Social Science Quarterly, 71*, 744–766.
Mohai, P. & Saha, R. (2006). Reassessing racial and socioeconomic disparities in environmental justice research. *Demography, 43*, 383–399.
Morello-Frosch, R., Pastor, M., & Sadd, J. (2001). Environmental justice and southern California's 'riskscape': The distribution of air toxics exposures and health risks among diverse communities. *Urban Affairs Review, 36*, 551–578.
Morgan, D. L. & Krueger, R. A. (1993). When to use focus groups and why. In D. L. Morgan (Ed.), *Successful focus groups: Advancing the state of the art*. London: Sage.
Neuman, W. L. (1994). *Social r esearch methods: Qualitative and quantitative appr oaches*. Boston, MA: Allyn & Bacon.
Pastor, M., Sadd, J., & Hipp, J. (2001). Which came first? Toxic facilities, minority move-in, and environmental justice. *Journal of Urban Affairs, 23*, 1–21.
Pollock III, P. H. & Vittes, M. E. (1995). Who bears the burdens of environmental pollution? Race, ethnicity, and environmental equity in Florida. *Social Science Quarterly, 76*, 294–310.
Pulido, L. (2000). Rethinking environmental racism: White privilege and urban development in southern California. *Annals of the Association of American Geo graphers, 90*, 12–40.
Savage, I. (1993). Demographic influences on risk perception. *Risk Analysis, 13*, 413–420.
Slovic, P. (1987). Perception of risk. *Science, 236*, 280–285.
Slovic, P., Fischhoff, B., & Lichtenstein, S. (1985). Characterizing perceived risk. In R. W. Kates, C. Hohenemeser, & J. X. Kasperson (Eds.), *Perilous progress: Technology as hazard*. Boulder, CO: Westview.
Stretesky, P. & Hogan, M. J. (1998). Environmental justice: An analysis of superfund sites in Florida. *Social Problems, 45*, 268–287.
Szasz, A. & Meuser, M. (1997). Environmental inequalities: Literature review and proposals for new directions in research and theory. *Current Sociology, 45*, 99–120.
Turner, R. H. & Kiecolt, K. J. (1984). Responses to uncertainty and risk: Mexican-American, black, and anglo beliefs about the manageability of the future. *Social Science Quarterly, 65*, 665–679.
US Department of Energy (1995). *Closing the circle on the splitting of the atom: The environmental legacy of nuclear weapons production and what the department of energy is doing about it.* Washington, DC: US Department of Energy.
Vaughan, E. (1993). Individual differences in adaptation to environmental risks. *American Psychologist, 48*, 673–680.
Vaughan, E. (1995a). The significance of socioeconomic and ethnic diversity for the risk communication process. *Risk Analysis, 15*, 169–180.
Vaughan, E. (1995b). The socioeconomic context of exposure and response to environmental risk. *Environment and Behavior, 27*, 454–489.
Vaughan, E. & Nordenstam, B. (1991). The perception of environmental risks among ethnically diverse groups. *Journal of Cross-Cultural Psychology, 22*, 29–60.
Veiluva, M. (1996). Federal responsibilities and realities: An alternative view of the cleanup of the nuclear weapons complex. *Social Justice, 22*, 126–139.
Weber, R. P. (1990). *Basic content analysis*. Newbury Park, CA: Sage.
Yandle, T. & Burton, D. (1996). Re-examining environmental justice: A statistical analysis of historical hazardous landfill siting patterns in metropolitan texas. *Social Science Quarterly , 77*, 477–492.

Chapter 4
Planning Cells and Citizen Juries in Environmental Policy: Deliberation and Its Limits

Brendan Flynn

4.1 Introduction

This chapter considers whether citizen juries are likely to encourage better environmental policy decisions. The chief argument presented here is that they achieve a type of deliberation over policy options which is valuable because it forces engagement between the views, values and information of ordinary citizen with those of policy experts or other 'insiders'. However, more ambitious claims for citizen juries must be balanced against their apparent institutional fragility, and related weaknesses.

Consideration of the background of the citizen jury idea is briefly given here, followed by discussion of some comparative experiences with citizen juries. This is followed by a more in-depth and critical evaluation of a trial citizen jury on waste policy held in Ireland, which the author administered.

4.2 Citizen Juries: Origins and Background

Citizen juries have emerged in the last decade as an institutional innovation that is designed to help decision-making and policy-making generally. In the UK, the centre-left leaning, *Institute for Public P olicy Research* (IPPR) has promoted the idea, where it has been employed by a number of British health authorities, and some charitable foundations (Coote & Lenaghan, 1997: 26–55; Lenaghan, New, & Mitchell, 1996). The exact origins however can be traced to experiments in Germany and the USA from the early 1970s. In Germany planning cells (plannungzelle) were developed by Professor Dienel of the *University of W uppertal* (Dienel & Renn, 1995), while in the USA, the movement for citizen juries has been advanced by the *Jefferson Centre for Ne w Democratic Processes*, where its origins lie more in an attempt to cope with the failures of established parties and

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representative institutions in taking decisions (Crosby, 1995; Stewart, Kendall, & Coote, 1994: 1). In Spain where citizen juries have been used during the 1980s and 1990s, directly influenced by the German model, the process is known as *Nucleos de Intervencion Participativa*.

It is quite clear that in the origins of the German and USA case the motivations for citizen juries stem from a wide-ranging critique of aspects of modern democratic policy-making (Bostwick, 1999). This includes the belief that special interests typically trump ordinary people's views, or that expertise is given too much credence by policy makers, or that what ordinary opinion is taken into account by policy-makers is often from opinion polls which only provide snapshots of relatively uninformed public views, not what people might think if allowed deliberate. More generally a distrust by many citizen of the modern policy process is also cited as a reason for juries, along with the belief that decision-making is increasingly beyond their control or comprehension (Stewart et al., 1994: 2–9). Citizen juries have also attracted the attention of political theorists who are interested in encouraging deliberative democratic arrangements and practices (Smith & Wales, 2000).

In practice citizen juries typically involve a small group of citizens, usually from a given local area, who are asked to decide over a fairly specific question or policy problem. Juries vary in size between 12 to 25 members, although these have sometimes being combined to create a network of juries and thus a regional or nationally scaled jury process can be conceived (Stewart et al., 1994: 14–15). The jury is facilitated in its deliberations by an adjudicator or moderator(s) and by teams of expert witnesses as well as other facilitators whose job is to prod and probe the jurors into debate and discussion. The jury is allowed to call expert witnesses and examine them through oral, written and audio-visual evidence. After a period of continuous sitting, typically anything from a weekend to 5 working days, the jury concludes with a report which is almost never legally binding on decision-makers, although the participating authorities usually agree to be honour bound to accept some of its findings. Jurors are paid for their participation and the entire process can be quite costly, ranging from €12,000 to €400,000. Indeed cost was one reason cited why a series of Bavarian planning cells on energy policy did not take place in the early 1990s (Stewart et al.: 29).

In most cases jurors are chosen by random or quota sampling techniques from electoral lists, or other sources. Careful screening is undertaken to ensure the sample is representative of the wider population. In general those who have perfected the techniques, go to great lengths to remove bias and ensure fairness and accountability in how juries are managed and run (Seiler, 1995: 143). Although bias was an early concern, it appears citizen juries for the most part have been run fairly in procedural terms, even if at times the sheer number of facilitators and experts may subtly influence the views and opinions of the jurors. It is interesting to note that while juries are given considerable freedom to call witnesses and manage the daily agenda of testimony, they are seldom given a completely free hand to organise proceedings.

In some cases juries are clearly made up of a sample that is not representative of the wider population, where a particular subset of people are sought. For example some health policy juries have included patients and consumers of services

on questions related to service delivery choices instead of a wider sample of the general public. The thinking here is to involve those with a direct stake in the decision as these are likely to be most affected (Coote & Lehaghan, 1997: 5). However, in theory the goal of a citizen jury is to provide a sample of 'ordinary' citizen and see how they view a particular policy problem.

In practice some juries can combine both types of participant, either by alternate juries or by merging stakeholders with a representative sample of citizenry and thus forcing both to interact. In this case those with a direct interest in the policy must reach a dialogue with those who represent a wider body of public opinion, a potentially useful exercise as it can moderate views, produce novel solutions, and reinforce the need for agreement to be reached.

4.3 Argument

The central argument of this chapter is that citizen juries should be cautiously welcomed as an innovative tool that can make for better policy decisions, but that this can only be likely achieved within a limited range of application and employment. Citizen Juries should not be seen then as a simple panacea to be widely used, or necessarily appropriate for solving especially difficult environmental disputes. In that regard a clear distinction should be made between Citizen Juries and Meditation or Alternative Dispute Resolution (ADR) approaches, whose promise is specifically to help resolve environmental policy conflicts through social negotiation. In contrast citizen juries deliver deliberation and policy learning rather than immediate policy change. Therefore I argue here for a more exact and qualified account of the possible benefits of citizen juries.

First, there is the benefit of a structured and substantive engagement between 'ordinary citizens' and policy experts or other 'insiders'. This should be considered genuinely valuable. Indeed one of the problems with many approaches to consultation and participation in environmental policy is that these often end up encouraging debate between established institutions, interests and issue groups. The result is that 'ordinary citizens' may be left emasculated within this process, and there is the attendant risk of 'rent seeking' though the passing of social costs onto a generally indifferent population.

Moreover, this deliberation is arguably much more extensive and far ranging than focus groups, as it empowers 'ordinary' citizens to be more flexible in determining the scope and scale of the agenda for deliberation, although they seldom have an entirely free hand in setting agendas. Indeed, if a better decision is likely wherever use can be made of all available information, then arguably citizen juries are a valuable means for forcing the ordinary opinions (*doxa*) of the citizenry into a structured engagement with the views of experts (*episteme*), an age-old concern of democratic institutions (Weale, 1999: 14).

Secondly, I argue that one can see genuine potential for citizen juries to be a good means for ensuring reflexivity among policy-makers, by revealing how

ordinary citizens view and respond to policy problems or choices. There is scope for a heuristic dividend, then if policy networks can learn from citizen juries, a view Armour for example endorses (1995: 181). However, one must be here very cautious about what can actually be learnt. Because 'ordinary citizens' are transformed from passive into active participants in the policy process, they are no longer in fact a faithful representative set of sometimes 'rationally ignorant/indifferent' voters and consumers. All one can learn is how then ordinary citizens *might* respond if a wider policy debate utilises certain types of evidence, argument and persuasion akin to a citizen jury. As a result the verdict of citizens may in the end not relate to those of a wider electorate who cannot have the benefit of several days of carefully managed deliberation, and indeed this has occurred (Armour: 184). Decision-makers then who simply act on jury findings may end up with opposition from the great mass of citizenry who cannot deliberate in the same way as any jury.

Thus a well-run citizen jury provides perhaps not a means of discovery as to what decision or policy option to endorse (questions of substance), but rather how to appreciate how good policy decision-making might evolve (questions of process). For example one can see how a given policy problem can be meaningfully discussed, intelligibly framed and fairly treated. One can learn what types of information ordinary citizens find credible, what concepts they dislike, if additional explanation, research and debate would likely be needed, and where the weight of public bias, ignorance, or sympathy lies. This is a considerable heuristic dividend within any policy process.

Finally, based on the lessons learned from the case study examined here, some precise and specific arguments are made here about the importance of media awareness for disseminating jury findings and the timing of citizen juries, with the suggestion that this should ideally be early on during the policy formulation phase.

Beyond these claims, it is hard to see how citizen juries offer a credible means to achieve better decisions, as the approach rarely achieves policy change in a clear-cut way. Moreover, the participation it engenders is still rather limited, temporary and passive, insofar as it centres around a discursive deliberation, rather than an actual lasting political mobilisation. Equally one can criticise citizen juries as placing excessive faith in an underlying instrumental rationality as regards to modern public policy decision-making, which may not in fact always exist.

Moreover, it is worth considering that deliberation in itself may not be enough to solve difficult policy problems, which can instead demand a different paradigm; that of conflict resolution and social negotiation. The jury approach is only capable of suggesting what ordinary citizens *might* say about the issues at stake *if* placed under carefully controlled conditions. This in itself usually lacks a decisive character, or moral force, to cause the warring factions to take note of what 'ordinary people' think. Moreover, such a jury does not tell us how the actual disputants can be reconciled, nor does it provide a suggested area of consensus for the protagonists, as any consensus reached is merely that of 'ordinary citizens' under tightly controlled conditions. There is then something of a naïve assumption among advocates of citizen juries that greater reflection will of itself help resolve a policy conflict, or

more specifically that it may allow for NIMBY type disputes to be avoided. It is argued here that this is likely to be an overly optimistic view.

More widely still there are concerns that citizen juries may be an elite discourse of managing ordinary civic opinion, whose aim is to render such more stable, rational and coherent. While many accounts agree citizens appear to have adequate capacity to understand and evaluate complex policy issues, in fact the more pressing worry is whether they will ever be taken seriously be established policy actors. In institutional terms then one can suggest citizen juries are often institutionally fragile outside of their own carefully constructed confines.

In the end Juries' findings often end up being but another 'input' into the decision-making process and very often less than decisive at that, unless one or more of the key players has 'ownership' of the jury. Yet if this is a feature of a jury, then paradoxically it raises issues of independence, trust and motivation. It is true that some citizen jury verdicts have been decisive in producing policy change, yet it is also notable that where the stakes are high (as for example in German energy policy juries – see below) or the policy involved is controversial, policy makers more often proceed with decisions without regard to jury verdicts.

Paradoxically then the scope for citizen juries to be effective depends on established policy insiders within conventional policy networks. It is they who have discretion to give effect to jury findings and it is also they who arguably stand to benefit the most from this type of deliberative learning that citizen juries can engender.

4.4 The Track-Record of Citizen Juries in Environmental Policy: Some Comparative Evidence

In terms of environmental policy, citizen juries have enjoyed a mixed but quite limited use. For example of the 28 various citizen juries which the Jefferson Center have run, only 5 have been concerned with environmental issues.[1] In Germany, planning cells have been used mainly to consider local planning issues, apparently with some success (Stewart et al., 1994: 11). However, it is notable that in the case of planning cells held on German energy choices (one national in 1985 and one local in 1993) the jury in both cases favoured a highly cautious approach to nuclear energy, but this made little actual difference to policy decisions at that time. Their findings were either ignored or rendered into long-term indicative guidelines only (Stewart et al.: 12–13). Indeed it was not until the German Green party entered coalition government in 1998 that a decisive shift away from nuclear energy was discernible in Germany.

[1] Source: Jefferson Center's website: http://www.jefferson-center.org/. This website gives a complete list of the various citizens' juries which have been administered by them since 1974. These include: Dakota County' Comprehensive Land Use Plan 1997, Minnesota's Electricity Future 1997, Comparing Environmental Risks 1996, Traffic congestion pricing 1995, Agriculture and Water policy 1985.

In the Basque region in Spain, a type of citizen jury project was established to ensure a maximum of public consultation for a motorway infrastructure upgrading, after terrorist activity put a stop to development (Stewart et al., 1994: 13). Note here the motivations for adopting this approach appears to be more a case of desperation as all other methods had failed, as well as a search for novel legitimacy, rather than a more genuine view that policy-makers had to value citizens views.

Models closer to mediation have also been experimented with in Stuttgart and Argau (Switzerland) both in the early 1990s on waste management issues (Stewart et al., 1994: 50–51). The Stuttgart (and environs) planning cells are particularly interesting because efforts were made to create a 'supervisory council' which included the local environmental spokespersons of the main political parties. This was done to ensure that the cell findings would have respect inside the conventional political decision-making process – a highly innovative idea.[2] While the planning cells worked well and produced a report that was agreed to even by the 'supervisory council', the established party hierarchies and normal decision-making actors did not fully accept the findings.

Consequently the implementation of the report was postponed for several years. This also produced several internal party political rows, for example the Green party representative resigned after his colleagues expressed non-agreement with the citizens limited acceptance of incineration.[3] The result is that waste policy in this area has been mainly determined by industry action and by federal legislative activity, rather than the wishes of a well-run planning cell process. Again the weak link here is the implementation of the planning cell findings rather than the administration of the process itself.

Another example of a citizen jury on waste policy which resembles the Irish case study discussed below, was a British jury for Hertfordshire County Council which examined whether the local government of the county should be responsible for all of its own waste (Delap, 1998: 23). This jury, which was administered by academics, ran for 4 days and produced a highly detailed report. The County Council did not however accept all of the suggestions in this report, but organisers argued they had to justify their existing policies and this forced them to reflect more about the different views of the public on waste compared with expert advisors (Delap: 23). Again the benefit here was essentially that of policy learning.

The experiences overall of these citizen juries on waste policy then, has been quite mixed with no major decisive role for the findings in terms of changing policy outcomes. In general it seems that the German experience of planning cells has been more effective than the US experience with citizen juries, at least in the sense of getting their verdicts respected (Stewart et al., 1994: 1). This is perhaps not surprising given that a greater degree of resources has been given by the German federal and state governments which permits more time and larger numbers to be

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[2] I am truly indebted to Professor Ortwin Renn of the *Akademie für_Technikfolgenabschätzung_in Baden-Württemberg* for his extensive comments and the details he provided relating the experience of the Stuttgart and environs planning cells process.

[3] Personal communication from Professor Ortwin Renn.

involved (up to 25 jurors over 5 days as the norm). Also as a result there is much more interest from these authorities in the findings and an increased likelihood they will respect them (Stewart et al.: 19, 47).

In contrast, the origins of the US approach to citizen juries are actually based in a scepticism towards representative official institutions per se, which may result in the findings being somewhat disembodied from a proximate institutional decision-making context or being seen by them as a 'rival' process (Stewart et al., 1994: 9–11). Moreover, Busenberg (2000) has suggested in the US context that it is the external support of policy-makers to implement findings, which is crucial to the success or failure of these initiatives, rather than how well organised they are or other internal features.

All the various approaches to citizen juries' stress that the amount of time available for discussion and debate is a crucial variable in the process, and frequently jurors complain that they do not have enough time to weigh up considerations and alternatives. One other important observation is the distinction between technical issues and value/normative issues (Stewart et al., 1994: 34). The citizen jury approach seems better equipped to cope with value issues, although jurors are also quite capable of coping with highly complex technical issues as well. Indeed in one US case, a jury on budget policy actually opted to draft its own budget, something the organisers felt would be too difficult for them (Stewart et al.: 21).

However, the approach of the *Jefferson Center* seems to be one of managing or steering the way jurors often deal with a problem while allowing them a wide margin of discretion. For example the tendency to cite specific points or 'wish lists' of things they want to see public authorities do, is often curbed (Stewart et al., 1994: 21). The argument here is that instead jurors must be encouraged to deal with integrated policy points and make suggestions in a cohesive way.

Arguably, this concern on the part of citizen jury organisers reveals an instrumentalist rationalistic view of the policy process which may be misplaced. In fact it is quite understandable for ordinary citizens to see policy problems this way, and indeed they may be quite correct in assuming the more effective way to go about addressing policy problems is through specific reforms, rather than through grandiose integrated planning or macro policy approaches. The history of public policy in many liberal democratic states is often a case of incremental piecemeal evolution, and is littered with conceptually coherent and balanced policy plans that have failed to be implemented for being too ambitious. It is therefore not clear what is so wrong with citizens drawing up concrete 'shopping lists' of what they like and what they don't in a given policy sector.

There is also a related wider issue here of how a jury decision is treated after it has been delivered. Most current practice tends to suggest fairly minimal requirements, such as that decision-makers will take consideration of their report in a follow-up meeting, for which jurors are sometimes asked to attend. There is usually an undertaking that if the decision-makers will not implement a jury's findings, then they will at least explain why. Otherwise progress reports are often sought to outline implementation of the findings where they are in agreement (Coote & Lehaghan, 1997: 9, 22)

The fact that institutional support for jury findings can be thin, is also another example of a certain naivety which some advocates of citizen juries hold about the modern policy process. For policy-making may not be as open enough to accept or manage the inputs from citizen juries. The result might well be that one ends up using a refined and fragile deliberative process against a rough and abrasive institutional environment where interests, issues and ideas (rational or otherwise) collide with one another. Moreover, brute political power, institutional inertia or interests may all count more than argument, persuasion, or rationality.

To conclude, one interesting discursive aspect of the citizen jury ideal is a belief in an underlying rationality to policy decisions, or that any policy process can be reformed to become more rational. This is the view that somehow rational argument 'can win the day'. This is surely true in many cases, and quite a laudable aim, but it is also blind to the fact that biased views and ideological values may be as important in policy making. It is true that citizen juries go some way in uncovering bias and myth on the part of citizen and experts, but it is not clear how they do this in a way which counteracts institutional power and interests. Moreover, beyond the bald rationality of the findings themselves and appeals to its representative nature, it is unclear how the results of a citizen jury will achieve a wider policy learning among the electorate and political decision-makers.

4.5 Case Study: The Galway 'Pilot' Citizen Jury on Waste Policy

In spring of 1999 the author successfully tendered for financial support from the Irish Department of the Environment and Local Government to run a pilot citizen jury on waste policy in the Connaught region. In October of 1999 a draft regional waste strategy document was published for the region and this formed the basis of the Jury's subsequent discussion (Galway Corporation, Galway County Council, M. C. O'Sullivan Ltd & COWI, 1999). The basic thrust of this plan was for a major shift away from landfill as a disposal option, and a major increase in recycling; up to 47% of future waste streams. Thermal treatment (an incinerator with energy recovery) was also to be introduced near Galway city as well, to deal with up to 250,000 t of domestic waste annually.

This plan was prepared by private engineering consultants for the two local governments involved, Galway County Council and Galway City Corporation, and was mandated to follow detailed national guidelines for waste policy (IDoELG, 1998) that in turn were supposed to follow EU norms on waste management. In fact Ireland is currently seeing the development of several regional waste plans to ensure that the Irish state meets its commitments under the EU waste laws. In more general terms this draft plan involved the co-ordination of efforts by several local governments, and in effect was a regional and local management plan combined. In practical terms the hard choices faced were over the exact location for residual landfills, the issue of how extensive recycling facilities would be, but most of all, whether the proposed incinerator/thermal treatment option was safe.

A jury of 12 were selected through a quota sample method using electoral registrars, and lasted for one entire working day. Originally 2 days had been planned but it proved impossible to manage financially, and a more serious concern were jurors' time commitments. Due to data problems it proved impossible to apply stratified random sampling techniques which is statistically more reliable than the quota sampling method eventually used (Babbie, 2001: 180). However, great attention was paid to how representative the group was and this aspect appeared in fact to be relatively unproblematic.

The result was that the jury worked well, if it was inevitably very forced for time. There was little difficulty on the part of the jurors grasping issues and indeed the level of discussion was quite sophisticated. Expert witnesses included a local environmentalist, a consulting engineer who helped prepare the plan, and a prominent national journalist who was an expert on environmental affairs. An official from the County Council also presented the plan in its basic form and made contributions throughout, although no staff from the city government attended.

In the end, a very detailed report was prepared, running to over ten pages, and jurors (O'Sullivan, 1999) had opportunities after the day of the jury to suggest changes and comments on this text. Several jurors did so, expressing growing concern about incineration as this was being hotly debated in the local media. This change in concerns of a few jurors was reflected in the final report, although the overall thrust of the jury report was broadly welcoming of the plan, subject to the important qualification that further information was placed into the public domain. In many ways this was a reflection of the brief time they had to weigh up evidence and perhaps the limitations of the experts present – for example, there was no expert on health risks. Yet it also arguably reflects a maturity on the part of the jury to refrain from making concrete findings on limited evidence and instead seek further information. Their demand then was not for one policy choice over another, but rather for more information of a particular type to be made available as part of the final decision-making process.

Specifically the jurors in their findings demanded follow-up reports on health issues associated with incineration, a study on waste transport, a study on economic elements associated with the plan in terms of costs for consumers, and a continued emphasis on waste education, litter, waste prevention and minimisation. The jurors also indicated they wanted an independent citizens expert appointed for the duration of the plan's debate phase to ensure fair discussion featured. It might be said that all of these issues were relatively serious omissions within the Draft Waste Plan, revealing again how a citizen jury can contribute to policy learning.

This report was then circulated to all elected members of the two local governments, planning staff of the local governments and all the local media. However, a response from the elected representatives was almost entirely absent,[4] and that from the local governments' environmental policy staff was minimal. In fact no formal feedback was offered and the findings were simply left to one side as the fruits of

[4] One local elected representative, a Christian Democrat, did reply and comment but felt disappointed the jury had reached no substantive conclusion. However, he did note the many excellent points raised which had not featured in debate before.

a limited and experimental jury that was only seen as a pilot type approach. In any event the local governments in question subsequently became embroiled in considerable controversy, as the incineration issue in particular became a cause for concern for local environmentalists, which meant they had little time to comply with the jury report or perhaps a disinclination to do so least it invite further controversy.

Reflecting this growing controversy, by early summer 2000, the regional waste plan was rejected by elected representatives of the City government (Siggins, 2000a, c). However, in a most controversial manner, a second vote was taken at the end of the summer of 2000 where a small majority changed their minds and actually re-voted for the plan, discounting their earlier vote on technical grounds! (Siggins, 2000b) In any event the national minister for the environment prepared enabling legislation, which allowed local government professional civil servants to legally impose the regional waste plan upon the local governments in question based on superior national laws. As a result the policy outcome appears to favour a following of the original plan unmodified. In other words the entire question was settled in a completely majoritarian and centralised manner, which ignored the spirit of attempts like citizen juries to engage in dialogue between state experts and 'ordinary citizens'. It is interesting to note there was a double loss involved here as well, for several of the issues the jury raised, such as policies on waste legislation implementation or waste transport, were novel concerns and have been largely forgotten about as the controversy centred in on the health risks associated with incineration.

There can be little doubt but that this pilot jury final approach must then be seen as a qualified failure. This is because it failed to appeal to elected representatives or officials as a viable document of true public significance. Even the fact that it contained several excellent suggestions was of little avail. Why was this the case?

One lesson to be learned from this Galway case study was that the timing of the jury turned out to be a serious issue. Simply put the jury was held at the wrong time. It was held just *after* the Connaught Regional Waste plan had been made public, and *before* opposition to the plan had really matured. The result was that those who gave expert evidence did not do so against the backdrop that subsequently emerged, of a heated and complex debate about the safety risks associated with incineration of wastes.

It was in this context that actual decisions had to be taken by the policy makers. The jury's discussion simply did not reflect this because it had not yet emerged as such an emotive point of disagreement. Within a month of the jury being held a new environmental movement had emerged, called Galway for a Safe Environment (GSE), which was an umbrella group covering many different personalities and subgroups. This group subsequently placed the health risks associated with incineration centre stage in its objections, and commenced a high profile campaign to that effect. The result was the jury could not give as much time to this as would have been ideal and this meant their findings were a little less relevant to the protagonists in the policy dispute.

Arguably where a policy problem has become so controversial then perhaps the methods of mediation and ADR would in fact be more appropriate than citizen juries. In particular the incineration issue had taken the form of such a polarised dispute between environmentalists, against the local governments involved, that the

citizen jury approach was unable to provide a suggested path of conflict resolution. The parties were simply so locked into conflict that neither side was likely to give much credence to its findings.

Instead, it would seem the more advantageous time for holding a citizen jury on waste policy would have been at the very preliminary stage, when targets and goals were being identified by policy-makers, and this is a view shared by Coote and Lehaghan (1997: 92). However, one risk with early stage juries is that this can lead to abstract discussion over policy principles, criteria or 'vision statements', which may not bring home to jurors the actual policy implications and hard choices faced.

Generally then the Galway case suggests that a jury needs careful employment at the right time, and seems unsuited to manage a policy debate that has turned into a major policy controversy. Deliberation of itself at a later stage in the policy process is unlikely to produce outputs that can tame the passions of the participants, unless they are heavily involved and have part ownership in such deliberative forums. If that course of action is taken however, arguably one begins to move the citizen jury concept then closer to the paradigm of alternative dispute resolution (ADR), as ordinary citizens would in effect be called to adjudicate between competing political factions. Note this would be quite different from traditional mediation. It is intriguing in this light that Professor Renn, an expert on planning cells in the German context, has suggested there is much more current interest from German policy-makers in mediation as a tool to achieve a way around controversial policy decisions rather than planning cells. However, there may be some scope for planning cells to be combined at a later stage after a preliminary attempt at mediation.[5]

One other lesson learned in the Galway case was that the dissemination of the findings requires a much more proactive approach. In this event one serious mistake was to leave dissemination of findings to local print media and there was an assumption that local representatives would use the detailed findings in their debates and decisions. In fact local elected representatives because they did not either know or sponsor the project were reluctant to cite findings from what they saw as a purely experimental forum. As regards the capabilities of local media, these can be of poor quality and uncertain professionalism. Moreover, because the 'story' at this stage was one of conflict between the local governments and the environmentalists, this was the dominant narrative which the local press adopted, and they were reluctant then to highlight what was seen as a marginal experiment which was somehow 'off the point'. Once a narrative of conflict locks in to frame the policy problem, the citizen jury story of rational civilised debate seems marginal at best, and perhaps far too bland for headline writers.

In concrete terms then one final lesson suggested by the Galway case study is that audio visual media, perhaps even at a national level for gravitas, seems better able to capture people's attention.[6] However, there is the rather obvious point that no TV network, even a local one, can set aside hours of programming to show the

[5] Personal communication from Professor Ortwin Renn.

[6] This is a view which Coote and Lehaghan support (1997: 95).

actual jury deliberation process at work, nor is it likely viewing rates would be high. The best one can hope for is a synthesised audio-visual presentation that can communicate the main features of the jury process, the issues at hand, and how ordinary citizens reached their verdicts. Yet there can be no doubt, that if the goal is to educate the general public about various policy options and complexity, the jury process and findings need wider dissemination.

4.6 Discussion: Policy Learning Through Deliberation?

There can be little doubt that citizen juries maximise deliberation over a policy issue at length. However, there are clearly different types of deliberation and citizen juries are novel in providing a distinctive type. For example deliberation among expert scientists or policy insiders is a type of scientific deliberation, and deliberation among administrators is merely discourse *among* experts who either have reputation and standing, or else have an institutional or material interest in the question at hand.

What is seldom achieved is deliberation *between* experts and ordinary citizens. The latter may be biased and uninformed, but if this is so it is arguably all the more important that experts see what the public think, feel and know about a given topic. Equally, the ordinary public may have its own type of particular knowledge to bring into the process. Ordinary citizens views may reflect the experiences of those who must directly use public services, or pay social costs, and these ultimately may be better placed to settle issues that are subjective. One very good example here is the example of the planning cell held over the design for a new city hall for Cologne, which produced a strong finding for green space to be a feature of the design, an idea which the architects had seemingly forgotten or omitted, and ultimately resisted (Stewart et al., 1994: iv).

The important lesson which citizen juries teach then is that one cannot underestimate the ability of ordinary citizens to see policy problems in alternative ways and may prioritise values and issues differently from various experts. More generally what is useful then is to have expert advice and views balanced by ordinary opinion, through a careful process such as a jury.

The precise gain should be that experts realise there may be more views to the problem than just their own and that citizens have a valid perspective on many issues. However, the ability of experts to educate and transform the perhaps uninformed citizenry through their expert evidence is rather limited to just the small numbers of participants of the jury. Unless the findings and process are televised or made public in some popular and widespread way, it is unlikely a larger body of the citizenry will pay attention or alter their views. This means that dissemination of the findings is crucial if a two-way process of deliberation is to be established.

One other reason why it makes good democratic sense to have expert debate tempered by the observations and views of citizens is that it ensures that the policy process does not become excessively closed and take the form of an internal

'auction' of interests. If environmentalists, government, experts and industry get together it is quite possible that controversy and debate will ensue. However, it is also plausible that parties could negotiate a settlement between themselves in ways which pass the costs of agreement on to the general public at large, who are not present in such debates. Citizen juries may be a viable way then of guarding against this to ensure that special interest groups are not engaged in excessive rent seeking behaviour (Damania, 1999; Hindmoor, 1999; Mueller, 1989: 229–246).

However, if it is fairly obvious how citizen juries provide for a novel and valuable form of deliberation, and in this make policy 'better', it is not clear that the case for participation through this type deliberation is very strong. One valuable insight of this chapter is that it reveals citizen juries embody a particular ideal of participation through deliberation rather than as conventional mobilisation (Webler & Renn, 1995). In effect this is a discursive account of participation which stresses the need for reflexivity and rationality in the policy process, but in a way that is not merely deliberation *among* specialised experts but a more genuine engagement *between* experts and citizens.

It is important then to note that citizen juries appear conceptually distinct from related radical participatory democratic claims that it is a good in itself for people to be making decisions and involved. Instead the stress is on how well people can evaluate an expert's testimony and often how citizens can decide which particular expert decisions they prefer. Citizen juries then still have a view of the citizen as fairly passive, even if a representative sample of them are rationally and intellectually engaged.

What is arguably still then missing here is an account of wider political mobilisation and action, as it its unclear how the approach can impact on the general policy process and upon the mass of citizenry. As I have argued above, there is nothing much wrong with this type of deliberative participation, but it may well fall far short of the types of proactive and lasting types of participation which several democratic theorists have sought. Without such direct political mobilisation, citizen juries are faced with a formidable challenge in terms of overcoming institutional structures, which may limit the impact of participatory initiatives to produce lasting change, unless it can find its own institutional niche and strength (Armour, 1995: 186).

Moreover, it is interesting that the direction which participatory innovations are taking within some environmental policy regimes contrasts with the citizen jury focus on the 'ordinary citizen' and instead appear to be edging towards a type of more open environmental neo-corporatism, with interest groups, industry and other diverse stakeholders engaged in well institutionalised, ongoing and structured negotiation (Downes, 1996; Green, 1997; van den Hove, 2000).

There is no doubt that many accounts of citizen juries are accurate when they stress that they have had a very positive effect on the citizens involved. Some have been mobilised by the experience to seek other types of political participation. Yet in general the citizen jury does not try to transform its jury members and empower them beyond a temporary process. In contrast more radical accounts of participation do actually stress the need to build capacities for critical engagement and civic action over time, for a greater number of citizens, in a way that will decisively alter

the decision-making environment in the long term. Yet there is no way that citizen juries can realistically transform a larger number of citizens, by virtue of scale issues and cost constraints.

Dissemination and communication of their findings could really help here of course and this must be a concrete area for improvement over the coming decade. However, the creation of a mobilised polity of somehow more active citizens does not seem to be a goal of citizen juries are likely to achieve.

What one does gain from citizen juries is then rather a very special type of deliberation, which may be quite valuable if planning authorities and parties to a dispute would only pay attention to it. However, the approach is weak in this area, as it not clear how conventional policy-makers can be forced to effectively engage in policy learning through juries, without risking to make the jury process more formal and thus 'owned' by these established actors.

4.7 Conclusion

In conclusion then do citizen juries offer a ready institutional device to secure better environmental policy decisions? The answer suggested here is a qualified yes, insofar as they provide for a type of deliberation that can moderate excessive faith in expertise alone within any policy process. This is valuable if policy actors learn about popular thresholds of understanding and support, or they begin to appreciate distinctive public preferences. They can learn that the public 'view' certain issues in ways that can be challenged if certain evidence and argument is presented to them. Conversely they may also find out that citizens, no matter how much persuasion and time is given, may still find certain policy arguments simply unpalatable.

It is hard to see beyond this though, to how citizen juries empower citizens in general. This is because the very process of the jury itself transforms such ordinary citizens in ways that mean they no longer accurately represent how ordinary citizens truly view policy disputes, outside of participation in a jury. The jury cannot clearly model these great mass of citizens and yet it is these citizens who are the very people that policy actors will in the end be more concerned about, as it is this great mass of citizens who will impact on voting, or levels of mass protest. Ironically then citizen juries seem to depend on the willpower of policy elites to be effective, and must still evolve within the 'shadow' of the bounded rationality of the great mass of citizens as periodic voters. Their promise of deliberation then would appear to have very definite limits.

References

Armour, A. (1995). The citizens jury model of public participation: A critical evaluation. In O. Renn, T. Webler, & P. Wiedemann (Eds.), *Fairness and competence in citizen participation: Evaluating models for environmental discourses*. Dordrecht, The Netherlands: Kluwer.

Babbie, E. (2001). *The practice of social research*, 9th ed. Belmont, CA: Wadsworth.
Bostwick, M. (1999). Twelve angry citizens: Can citizens' juries improve local democracy in New Zealand? *Political Science, 2*, 236–246.
Busenberg, G. J. (2000). Resources, political support, and citizen participation in environmental policy: A re-examination of conventional wisdom. *Society & Natural Resources, 6*, 579–587.
Coote, A. & Lenaghan, J. (1997). *Citizens' juries: Theory into pr actice*. London: Institute for Public Policy Research.
Crosby, N. (1995). Citizens juries: One solution for difficult environmental questions. In O. Renn, T. Webler, & P. Wiedemann (Eds.), *Fairness and competence in citizen participation: Evaluating models for environmental discourses*. Dordrecht, The Netherlands: Kluwer.
Damania, R. (1999). Political competition, rent seeking and the choice of environmental policy instruments. *Environmental & Resource Economics*, 415–433.
Delap, C. (1998). *Making better decisions: Report of an IPPR symposium on citizens' juries and other methods of public involvement*. London: Institute for Public Policy Research.
Dienel, P. C. & Renn, O. (1995). Planning cells: A gate to "fractal" mediation. In O. Renn, T. Webler, & P. Wiedemann (Eds.), *Fairness and competence in citizen participation: Evaluating models for environmental discourses*. Dordrecht, The Netherlands: Kluwer.
Downes, D. (1996). Neo-corporatism and environmental policy. *Australian Journal of P olitical Science, 2*, 175–190.
Galway Corporation, Galway County Council, M. C. O'Sullivan Ltd & COWI (1999). *Draft connaught waste mana gement plan* . Galway, Ireland: Galway Corporation/Galway County Council.
Green, A. J. (1997). Public participation and environmental policy outcomes. *Canadian Public Policy-Analyse De Politiques, 4*, 435–458.
Hindmoor, A. (1999). Rent seeking evaluated. *Journal of Political Philosophy*, 434–452.
IDoELG/Irish Department of Environmental & Local Government (1998). *Waste mana gement: Changing our ways – a political statement* . Dublin: IDoELG.
Lenaghan J., New, B., & Mitchell, E. (1996). Setting priorities: Is there a role for citizens' juries? *British Medical Journal, 7046*, 1591–1593.
Mueller, D. C. (1989). *Public choice II*. Cambridge: Cambridge University Press.
O'Sullivan, K. (1999). Galway jury out on council's plans for waste disposal. *The Irish T imes*, 08/11/1999.
Seiler, H-J. (1995). Review of planning cells: "Problems of legitimation". In O. Renn, T. Webler, & P. Wiedemann (Eds.), *Fairness and competence in citizen participation: Evaluating models for environmental discourses*. Dordrecht, The Netherlands: Kluwer.
Siggins, L. (2000a). Galway dampens thermal waste plan. *The Irish Times*, 26/07/2000.
Siggins, L. (2000b). No waste plan and widespread dumping. *The Irish Times*, 04/09/2000.
Siggins, L. (2000c). Galway waste plan seen as 'fundamentally flawed'. *The Irish T imes*, 16/05/2000.
Smith, G. & Wales, C. (2000). Citizens' juries and deliberative democracy. *Political Studies, 1* , 51–66.
Stewart, J., Kendall, E., & Coote, A. (1994). *Citizens' juries*. London: Institute for Public Policy Research.
Van den Hove, S. (2000). Participatory approaches to environmental policy-making: The European Commission climate policy process as a case study. *Ecological Economics, 33*(3), 457–472.
Weale, A. (1999). *Democracy*. London: Palgrave Macmillan.
Webler, T. & Renn, O. (1995). A brief primer on participation: Philosophy and practice. In O. Renn, T. Webler, & P. Wiedemann (Eds.), *Fairness and competence in citizen participation: Evaluating models for environmental discourses*. Dordrecht, The Netherlands: Kluwer.

Chapter 5
The Power of Visioning: The Contribution of Future Search Conferences to Decision-Making in Local Agenda 21 Processes

Angela Oels

5.1 Introduction

The Future Search Conference is one of the most innovative methods for stakeholder involvement employed in Local Agenda 21 processes. This chapter seeks to evaluate the contribution of the Future Search Conference method to enhancing the quality of local decision-making in the context of Local Agenda 21. The chapter provides empirical evidence from a German and an English case study and reviews it from the normative perspective of collaborative planning theory. It concludes by proposing guidance for the successful employment of the Future Search Conference method.

5.2 The Future Search Conference Method

5.2.1 A New Generation of Systemic Participation Methods on the Rise

A new generation of methods for participation in decision-making processes evolved in the 1990s (Levett, 1997; New Economics Foundation, 1998; Wilcox, 1994). These new methods seek and process information on the basis of systems thinking, require broad stakeholder involvement, utilise principles of self-organisation and are vision-centred (Senge, 1998; Wheatley, 1992). Examples of these new large group methods are Open Space Technology, Future Search Conference, Search Conference and Real Time Strategic Change (Bunker & Alban, 1997). These new participation methods can be traced back to three intellectual traditions: Kurt Lewin's social psychology, Wilfried Bion's psychoanalytic theory and Ludwig von

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Bertalanffy's systems theory as applied to organisations (Bunker & Alban: 11). They became fashionable at a time when increasing global interdependence (often coined globalisation) forced organisations and communities to become more responsive to changes in their organisational environment by employing a whole systems perspective in their planning processes (Innes, 1996). The Future Search Conference is a prototype of these new methods.

5.2.2 Origin, Principles and Basic Assumptions

The Future Search Conference method was developed by the American Marvin Weisbord and first published in 1987 (Weisbord & Janoff, 1995, 1996). The development of the method was inspired by Eva Schindler-Rainman's and Ronald Lippitt's large-scale community futures conferences in North America in the 1970s and by Eric Trist's and Fred Emery's Search Conference model, first used in 1960.

The aim of a Future Search Conference is to bring together a broad spectrum of local stakeholders in a 3-day collaborative process in order to create a shared vision for the future of a community or organisation. The 64 participants are carefully chosen by an appointed or self-selected steering group to represent those who will be affected by the outcomes, those who have unusual perspectives on the issue to contribute and those who have the decision-making power to implement the agreed visions. The seating arrangement features eight round tables spread out throughout the conference room. Due to the large group size, most of the work in a Future Search Conference is carried out in small groups of eight that report their results to a plenary session. The small group work alternates between homogenous stakeholder groups and mixed groups.

The format of the Future Search Conference is a fixed schedule of predetermined exercises, all carefully engineered to create commitment and a cooperative setting. The choreography of the Future Search Conference moves from the past through the present into the future before it returns to the here and now in order to formulate action plans and strategies. A dialogue process leading to a consensus is at the heart of the process while conflicts are explicitly left unaddressed. What makes the Future Search Conference interesting given our interest in quality of decision-making, is that participants are regarded as experts in their own right and are encouraged to use the full range of ways of knowing – including anecdotal knowledge (for a detailed description and critical discussion of the Future Search design see Oels, 2002).

5.2.3 Expected Results

According to the developers of the Future Search Conference (Weisbord & Janoff, 1996: 73), the method delivers results in a number of areas. First of all, a Future Search Conference offers an opportunity for the individual to discover their own resourcefulness and to take back responsibility for themselves. Bridging the cultural

gap between the various stakeholder groups and legitimating their differences as a fact of life to be lived with is supposedly a second major achievement of the conference. Third, the conference is supposed to allow participants to learn from and with each other. Finally, new networks and new projects are expected to form which will last beyond the conference itself. Weisbord and Janoff emphasise that they expect 'faster implementation of action plans' when the principles of the Future Search Conference are adhered to than if not (Weisbord & Janoff: 83).

5.3 Future Search as a Tool for Stakeholder Involvement for Local Agenda 21

The trend towards stakeholder involvement at the local level has been significantly strengthened by Local Agenda 21, one of the outcomes of the Rio Earth Summit.

In the early 1970s, the supposedly superior development model of the industrialised countries with its emphasis on economic growth was confronted with 'limits to growth' (Meadows, Meadows, Randers, & Behrens, 1972). Development seemed to be running up against limits in time (durability of development with regards to future generations) and limits in space (distribution of development amongst present generations). Also, the nature of economic growth itself became the focus of the debate, with some claiming that qualitative but not quantitative growth could be sustained. Over the course of 2 decades, the concept of sustainable development became crafted as a solution to the limits to growth. At the United Nations Conference on Environment and Development (UNCED) in Rio 1992, the concept of sustainable development was translated into a 40-chapter programme of action called Agenda 21. Sustainable development has a procedural and a substantial component. The substantial component of sustainable development implies a development path that equally considers social, ecological and economic requirements. The procedural component of sustainable development prescribes the involvement of all stakeholders in a dialogue or cooperative process with the aim of achieving a consensus on a local interpretation of sustainable development. One of the major assumptions of Agenda 21 is that win-win solutions can be easily found when all stakeholders are brought around the table.

Of particular interest for this chapter is Chapter 28 of Agenda 21, which suggests that local authorities should produce a local version of Agenda 21, in which they interpret the implications of sustainable development for their locality. This is to be done in "a consultative process with their local populations" leading to a "consensus on a 'Local Agenda 21' for the community" (UN, 1992, Agenda 21, Chapter 28). It is quite clear that the transition to sustainable development requires new methods for stakeholder involvement at the local level. Therefore, Chapter 28 of Agenda 21 has provided strong new impetus for local experiments with public participation in decision-making (for a more detailed review of the impact of Local Agenda 21 in Britain and Germany see O'Riordan & Voisey, 1998).

Despite the fact that it was never invented for this reason, the Future Search Conference method seems ideally suited to facilitate the involvement of diverse

stakeholders in a Local Agenda 21 process. The Future Search emphasis on stakeholder selection supports Local Agenda 21 organisers in choosing the 'right' mix of people. The main outcome of a Local Agenda 21 process is supposed to be a consensus on a vision and related action plans – just like the outcome of a Future Search Conference. However, there are also two inbuilt problems with using the Future Search method for the purposes of Local Agenda 21. First, the exclusive mode of inviting conference participants is at odds with the aim of Local Agenda 21 to involve as many citizens as possible in direct interaction. Secondly, the Future Search method with its rejection of expert inputs offers no mechanism to ensure that the outcomes are in line with the ecological (or social/economic) requirements of sustainable development.

5.4 The Normative Ideal of 'Collaborative Planning' as Measuring Stick for the Evaluation

5.4.1 The Research Question and Methodology

The data collection was guided by a research interest in the impact of a Future Search Conference on the participants, on local political decision-making and on the local community in a wider sense. A careful analysis of the factors that influenced the impact of a Future Search Conference (or lack thereof) led to a critical discussion of institutional arrangements which support or hinder effective decision-making.

The research presented in this chapter was guided by the rationale of the exploratory case study method (Stake, 1994; Yin, 1994) and based upon the principles of naturalistic inquiry (Lincoln & Guba, 1986). The following analysis draws on interviews, focus groups and document research carried out during two periods of field work (a total of 3 months each) in Olching and Rushmoor from 1997 to 1998. Moreover, the findings were updated on the basis of telephone interviews carried out in February 2000. The data was originally gathered in the context of a stakeholder based evaluation of each Future Search conference over a period of 2 years (Oels, 2000).

5.4.2 Collaborative Planning as Evaluation Framework

The evaluation of innovative participatory processes is a topic that is still in its infancy (Chess, 2000: 769; Oppermann & Langer, 2002: 76; Rowe & Frewer, 2000: 3). Systematic, long-term evaluation studies of stakeholder dialogues are still the exception (Flyvbjerg, 1998; Helling, 1998; Joss, 1995; Kuper, 1997; Oels, 2003; Polanyi, 2002; Street, 1997). The existing evaluation studies vary widely with regards to their purpose, focus, scope and disciplinary perspective. While the methodological and theoretical issues of evaluating participatory processes have been discussed at length (for example Chess, 2000; Oels, 2006), no set of commonly used indicators for the evaluation has emerged yet. Criteria for theory-based evaluations have been taken from critical theory (Webler, 1995), collaborative planning (Healey, 1997),

risk communication (Durant, 1995; Rossi, 1997; Rowe & Frewer, 2000), public participation (Fiorino, 1990; Rowe & Frewer, 2000; Webler, 1995) and democratic theory (Barber, 1984; Blaug, 1996; Fiorino, 1990). When selecting a set of criteria, my aim was to choose one that resonates in many ways with the values implied in the Future Search Conference design.

On the basis of this criterion, collaborative planning theory (Forester, 1989; Healey, 1997; Selle, 1996; Tewdwr-Jones & Thomas, 1998) was chosen as a measuring stick for the evaluation. Collaborative planning theory upholds the citizens' capacity for learning and genuine public thinking.

The argument for increased and higher quality participation as put forward by collaborative planning theory rests on two pillars: one is a rejection of the privileged role of experts in favour of civic science, the second is a rejection of the notion of a consumer with fixed preferences in favour of the learning citizen. Healey bases collaborative planning firmly in a post-positivist understanding of science, where all knowledge is seen as socially constructed an inherently value-based (Healey, 1997: 29–30). The knowledge provided by experts is no longer regarded automatically superior to other ways of knowing (Fischer, 1993: 183). Theories of collaborative planning strongly adhere to the view that people's very consciousnesses and preferences are formed in social interactions with others and are subject to constant review in the light of new experiences (Healey). In this process of constant social learning, self-interests can be modified to accommodate public interests. According to collaborative planning theory, a decision can only be as legitimate as the process that willed it into being. Table 5.1 lists the process criteria that characterise a deliberative

Table 5.1 The essence of collaborative planning theory (Oels, 2003)

Collaborative planning theory
Process criteria
Fairness
– Diversity of stakeholders present
– Constructive dialogue
– Fair process
Competence
– Participants are experts on their affairs
– Allowing multiple ways of making validity claims
– Using all relevant information
– Systems thinking
Outcome criteria
A consensus followed by action
Capacity building criteria
New contacts and partnerships
Learning
– Transcending egoistic preferences towards the common good
– Scope for innovation
– Learning amongst the participants
Trust
– Building trust
– Reviving local democracy
– Regenerating community spirit

process carried out according to collaborative planning theory, the expected outcomes and the resulting capacity building. This list will serve as a measuring stick for the evaluation of two empirical cases where the Future Search Conference was employed.

5.5 The Future Search Conference Method in Practice

This section will present empirical evidence gathered in two case study areas and evaluate it in the context of collaborative planning theory. The first section introduces the two case study areas, the second section presents the empirical findings for each of the evaluation criteria proposed by collaborative planning theory above.

5.5.1 Introducing the Case Study Areas

Given the lack of systematic evaluations of Future Search Conferences, it seemed most appropriate to follow the rationale of the exploratory case study method and to study two cases in great depth (Stake, 1994; Yin, 1994). The two cases were selected for investigation because they were the only ones in Britain and Germany in 1997 known of where a Future Search Conference was employed for the purpose of a Local Agenda 21 process.

Gemeinde Olching is a German commuter region on the verge of a town West of the Bavarian capital Munich. The formerly rural area with its three former villages Olching, Esting and Geiselbullach has experienced exponential growth in housing construction and population size since the construction of a fast train connection to downtown Munich in 1972. The area now houses 21,000 people. Olching's Local Agenda 21 process was initiated by the local adult education institute which conducted a 'special programme' of seminars on Agenda 21 from 1996 onwards, featuring the Mayor as patron. The Future Search Conference was organised by local volunteers to launch the Local Agenda 21 process in a bottom-up manner with minor financial support by the Mayor.

Rushmoor is an English commuter area 30 miles West of London, consisting of the two towns Aldershot and Farnborough with a population of 86,000. Rushmoor's high dependence on the military has made it economically vulnerable in times of frequent Defence Reviews and budget cuts. It could be argued that a vision for the civic transformation of the area was needed and a Future Search Conference could be considered a proactive response to this challenge. It was the Chief Executive of Rushmoor Borough Council himself who initiated Rushmoor's Local Agenda 21 process by creating the post of a LA 21 officer and by supporting the officer's plan to conduct a Future Search Conference.

5.5.2 Process Criteria

The following presentation of empirical evidence gathered in the two case study areas will be structured along the criteria proposed by collaborative planning theory as introduced above.

5.5.2.1 Fairness

The Future Search Conference method aims to bring a diverse range of 64 stakeholders into the conference room. Participant recruitment to the Future Search Conference was the task of an appointed steering group in both case study areas. Each steering group consisted of 8–15 highly influential members, each of whom represented one of the major stakeholder groups of the community. The steering group carefully selected participants from a range of those affected by the outcomes, those with information on the local key issues and those with resources to facilitate action. There was no process by which a sector could nominate their own candidates or by which those who felt they would be affected by the outcomes were given a right to participate. Limiting the number of participants to 64 and selecting participants in a top-down manner implies that access to the Future Search Conference is always highly restricted (boundary rules).

In practice both Future Search Conferences gathered a local elite of committed people, but failed to attract a cross-section of 'ordinary' citizens. This bias is implied in the Future Search guidance which emphasises the importance of getting the local movers and shakers into the conference room – in addition to the citizens. In one of the case studies, the business sector and young people were under-represented at the conference. This weakened the status of the conference outcomes in both case studies and made it easy for politicians to dismiss them as the views of one particular fraction of the local community. Still, the conference participants were from a wide enough range of sectors to facilitate a widening of horizons amongst conference participants.

Fairness has been interpreted by Webler (1995) as the equal opportunity of all conference participants to shape the agenda, select the rules and the facilitator, look after rule enforcement and to discuss. The decision to launch the Local Agenda 21 process by hosting a Future Search Conference was taken by the initial group of Local Agenda 21 activists in Olching and by the Local Agenda 21 officer in Rushmoor and supported by the steering group after some further discussion of advantages and disadvantages. The selection of the conference participants is a key concern with regards to fairness. As discussed above, the exclusive mode of participant selection was criticised as unfair especially by those not invited to the conference. In Olching, the fact that only 5 out of 30 councillors were invited, led to open hostility of the majority of councillors towards the Future Search Conference project: "*I believe that*

before the conference, many people were upset because they had not been invited to the Future Search Conference, apparently because they are not important. And every councillor believes of himself that he is important in the community . And if he isn't included, something must be seriously wrong" (councillor, Olching).

The overall title or topic of a Future Search Conference is determined by the steering group. The agenda for a Future Search Conference is fixed by the guidance available on the method, which urges facilitators not to compromise the recommended step-by-step proceedings and allocated timings in any way (Weisbord & Janoff, 1995). Participants are expected to follow the instructions of the facilitators in an unquestioning way, often without understanding the overall purpose of a conference task. This has made a number of conference participants feel as if they were subjected to a large "*social experiment*". Also, the procedure prescribed for the identification of the common ground (aggregation rule) was regarded as unfair by a majority of conference participants, as key issues were filed away as 'unresolved differences' without further discussion.

It is only within the framework of each conference exercise that participants are free to identify their own priorities and issues of their choice. In the small groups, all are equally charged with selecting a facilitator, a note-keeper, a time-keeper and a person to report back to the large group, and to swap these roles around for each new task given to them. All participants have an equal opportunity to contribute to the conference deliberations in theory. In my two case study conferences participants complained that the articulate and those with professional experience in discussing political issues dominated. One focus group in the Rushmoor case study complained that especially councillors had dominated the small group work because they always seemed to "*feel a need to say something"* because "*otherwise they wouldn't be a councillor*".

A key principle of the Future Search Conference is that each person's point of view is regarded as equally valid. All energies are directed towards the common ground, namely that which the participants can agree upon without ever going into value disputes. Both investigated Future Search Conferences established an over all collaborative mode of deliberation which struck conference participants as exactly the opposite of the adversarial rituals of party politics. Participants at both conferences showed themselves impressed by the level of responsibility and commitment displayed by their fellow participants. They reported that they had treated each other with a previously unknown amount of respect.

"*A behaviour of showing off, which some people seem to have as a habit, that was missing, everyone contributed on a factual level*" (male, statutory sector).

"*You treat each other very carefully, none of the typical I hit you and you hit back, but instead playfulness, allowing others to speak up, allowing opposing viewpoints to be aired*" (councillor).

Some participants claimed however that the constructive conference atmosphere had only been possible because the conference was not threatening to anyone's interests. The conference method was supposed to have ensured that no decisions were taken that 'hurt' any particular stakeholder group. As one participant remarked: "*It is easy to agree as long as it doesn't cost anything*."

5.5.2.2 Competence

In this section I will discuss to what extent the two investigated Future Search Conferences lived up to collaborative planning theories' objective of competence. Competence according to the developers of the Future Search Conference is anchored in the selection of the conference participants and in treating them as experts in their own right – in their capacity as local residents, parents, charity activists, businessmen or Council members. By bringing together a carefully selected spectrum of stakeholders to an issue, the Future Search Conference aims to bring the relevant information on the topic under discussion into the room and to make it available to all stakeholder groups as a basis for decision-making and action planning (information rule). Half of the conference is spent building a shared pool of local expertise from a systems perspective, visualised on posters in the room. Participants reported that they had learned a lot from each other over the course of the Future Search Conference. Educational inputs during the conference days are strongly discouraged as participants would feel less inclined to draw on their own resourcefulness.

The Future Search Conference method successfully encourages participants to draw on multiple ways of making validity claims, thereby refusing to give scientific knowledge claims any air of superiority. Future Search facilitators are supposed to encourage participants to back any argument they make with anecdotal evidence or real-life examples. Overall, this worked well at both observed conferences. Future Search Conference facilitators are supposed to establish the legitimacy of emotions at the opening of each conference and to encourage participants throughout to be authentic in their full human capacity. When asked to draw a diagram of their emotions during the 3-day conference, the majority of conference participants drew a picture of an emotional roller-coaster ride.

While both observed Future Search Conferences facilitated a new local knowledge base amongst the conference participants, this knowledge base could not be extended beyond the conference room and was therefore not drawn upon by the local Council for their formal decision-making processes. A minority of conference participants felt that more input from experts could "*have stopped a lot of useless squabble* " (male, business sector, Rushmoor).

5.5.3 Capacity Building Criteria

5.5.3.1 New Contacts and Partnerships

Both Future Search Conferences facilitated very well the formation of new and the revival of old contacts amongst the conference participants: "*It's been helpful in establishing contacts with people within the Council b ut also within the local community, so that you got a name that you can contact if you got a query , a point that you want to r aise, information you want on anything* " (female, voluntary sector, Rushmoor).

In Rushmoor and Olching, conference participants gave many examples of collaborative endeavours that had become possible as a result of these new or revived contacts. These often crossed stakeholder group boundaries. The owner of the largest supermarket in Olching had decided to introduce regionally grown foods onto the shelves of his store as a result of suggestions made to him at a Local Agenda 21 meeting, which he had attended following the conference. In Olching, conference participants reported that they now greeted more people in the street as a result of the conference. I conclude that the Future Search design is highly effective in creating a conference climate that is conducive to establishing rapport and trust between conference participants, and that lasting networks are formed as a result.

5.5.3.2 Learning

This section will review the extent to which the investigated Future Search Conferences facilitated learning and systems thinking amongst the conference participants as set out in collaborative planning theory. In both case studies, participants reported that meeting other conference participants had widened their horizon about what was going on locally, what organisations existed and what they were doing. Participants in both case study conferences generally felt after the conference that they had a better overview of the local issues that needed tackling and some had discovered new opportunities for the future development of the area. Participants at both conferences realised the interconnections between seemingly disconnected issues. A particularly challenging kind of learning took place in the mixed small groups that had the task of performing an ideal future scenario together. Participants were forced to question their taken for granted assumptions about how the world should be. An important part of the learning was that prejudices against other stakeholder groups were broken down. A Green party member in the Olching conference reported:

> I think a few people who I was sharing a table with and with whom I discussed a lot, will take me more seriously from now on, because they have realised that it is not my aim to get everybody to wear nose rings.

I conclude that learning is an inbuilt design feature of the Future Search Conference and happens in diverse ways.

5.5.3.3 Building Trust, Community Spirit and Reviving Local Democracy

The Future Search Conferences have not significantly increased the trust between citizenry and Council in either of my case studies. This was first of all down to the fact that the conference by the nature of its composition collected the already converted, namely those who were known for their willingness to make an active contribution to the local community in a voluntary or professional capacity. Secondly, both conferences only involved a tiny proportion of councillors and

officers. Therefore, the conference offered little opportunity for the formal holders of political power to learn.

In both case studies, the fact that the Future Search Conferences took place and were considered a success has made Future Search a viable option for other Council or voluntary sector consultation processes. Moreover, both conferences stand as living examples that the citizenry does want to be involved in local decision-making processes. In both cases, a number of participants reported how their sense of belonging to the local community, of being a valued member of it, had increased as a result of the conference. They reported that their willingness to make a contribution to the local community had increased as a result of connecting with such a large number of people who seemed to care deeply about its future.

5.5.4 Outcome

5.5.4.1 A Consensus Followed by Action

In both case study conferences, a consensus vision was achieved as envisaged by collaborative planning theory. Nevertheless, its quality was subject of great disappointment. First of all, few of the many innovative ideas generated by the ideal future groups translated into common ground statements. Secondly, the conference results lacked the detail to be meaningful, ignored financial considerations, failed to identify clear priorities and included a number of ill-thought-through ideas, for example a monorail in Rushmoor: "*It wasn't that I didn't like the outcomes or that the y didn't match my own visions for the futur e, but I see fe w can realistically be implemented. Let's take an example. One of our visions was no unemployment any mor e. That is absolutely utopian. It won't be possible to achieve that. And I feel the same way about most things, no matter what is in the way , if it's money, the Council or the citizens* ."

The participants explained these shortcomings in quality with reference to the time pressure at the conference. Somebody moreover suggested that the consensus had only been achievable because it was formulated in vague terms, had no direct financial implications and did not 'hurt' any sector's interests. It is also not an aim of the Future Search Conference design to facilitate tough negotiations about trade-offs and priorities. Instead it is hoped that over time, the common ground between the participants will grow through continuous communicative involvement.

The action groups which had formed during the last phase of the conference had achieved nothing visible on the ground 11–14 months after the conference. Only two out of six action groups (in both case study areas) were still meeting regularly a year after the conference while all other groups had dispersed. In Rushmoor, one of the most active groups was the 'Rushmoor Environment Forum', which initiated a 'Local Environment Award Scheme' for projects which are of benefit to the local environment. The award was actually given to a local group for the first time in November 1999. The other group in Rushmoor was the 'Rushmoor Arts Forum', which was struggling to secure an empty shop unit in one of Farnborough's big

malls for a community arts centre. In Olching, one of the active groups was trying to secure a self-managed meeting room for young people, while the other was trying to mobilise the resources for a community arts facility. Two years after each conference, these groups had not succeeded in their efforts but not given up either. While the outcomes of both Future Search Conferences were presented to the local Council, no vote was taken to commit Council resources to any of the specific project ideas generated.

5.6 The Future Search Conference in the Context of Power Relations

5.6.1 Explaining the Failure to Deliver

An understanding of power relations inside and outside the conference room is crucial to making sense of what happens and fails to happen after a Future Search Conference. The Future Search Conference by design creates a win-win world of common goods and turns a blind eye to interests and conflicts. There were two instances worth mentioning during both case study conferences, where participants openly or secretly resisted the implicit and explicit rules and norms of the Future Search Conference. The majority of conference participants in both case studies considered the procedure prescribed for the identification of the common ground as highly unfair. As a result, there was weak ownership of the produced consensus and little will for implementation behind it. Issues which are decisive for the future development of the region were excluded from further discussion as 'unresolved differences', simply because they are highly controversial. Finally, a majority of conference participants were unpleasantly surprised that follow-up action was expected of them. When the action groups formed towards the end of the conference, some groups openly or secretly agreed not to meet again, thereby directly explaining half-hearted follow-up activities.

A Future Search Conference can only be as good as the context it is embedded in. Three more factors were decisive in explaining the lack of follow-up action in the two case study areas: (i) personalities, (ii) institutional gap between representative and participatory democracy and (iii) central-local government relations.

Both Future Search Conferences would never have taken place without the outstanding commitment of a few individuals. It was down to a withdrawal of these champions after the conference, that the follow-up process in both case study areas suffered from a lack of leadership. In the English case study, the former champions left their professional positions (and the area) for career advancement. In the German case study, those who had organised the Future Search Conference as volunteers decided that it was time for the Council's professional staff to take over the burden of coordination. In the absence of capable Council staff, this created a leadership vacuum.

A second major factor for explaining the lack of follow-up action was the institutional gap between the logic of representative democracy and the logic of

participatory democracy. A major problem of both Future Search Conferences was that they were not sufficiently linked to the formal decision-making processes of the Council. This is partly down to the fact that Local Agenda 21 processes in general tend to have weak links with Council decision-making, not least because of their emphasis on citizen empowerment. Secondly, a Future Search Conference has no inbuilt mechanism of transferring outcomes to the political decision-making process (authority rules). Instead, it is a case-by-case decision, if Council support is needed and how it may best be won. The combination of the Future Search Conference with the Local Agenda 21 process seems to pose a double institutionalisation problem.

In the English case study, the Future Search Conference was initiated by the Council but defined as 'for the people by the people', almost excluding the possibility of Council intervention. A joint forum of key activists from the conference and of interested councillors was created more than 2 years after the Future Search Conference, but had little to monitor as most follow-up activities had ceased by that time.

In Olching, there was from the beginning open conflict between conference steering group and elected councillors. Only one councillor from each party was invited to participate in the conference, thereby making the large majority of councillors feel excluded. The councillors therefore emphasised their role as elected representatives of the people and discredited the Future Search Conference as a self-selected lobby group which could not speak in the name of the people with any degree of legitimacy. The outcomes of the Future Search Conference were discussed in a Council meeting 9 months after the conference but no vote was taken on any concrete proposal. At a follow-up meeting 2 years after the conference, reassembled participants drafted Council motions which collaborating councillors had offered to submit to the Council for a vote. This change in strategy demonstrates that in order to be heard at all, LA21 activists were forced to adopt the practices of representative democracy.

Finally, even if there had been Council support, the decision-making power for many of the issues raised by the conference participants is not found at the local level. The future of Olching's agricultural sector lies in the hands of the European and national agricultural politics, the future of troop residence in Rushmoor is a decision of the national Ministry of Defense. The successful implementation of Local Agenda 21 processes will therefore have to be embedded in effective multi-level cooperation. This is a factor which is painfully absent in British and Germany Agenda 21 processes.

5.6.2 Implications for the Use of Future Search Conferences

The empirical evidence presented above suggests a number of strengths of the Future Search Conference as a method of stakeholder involvement. A Future Search Conference is strong at building appreciation of diversity and shared meaning amongst a diverse group of stakeholders. It facilitates new contacts across stakeholder boundaries, trust and joint action on a one-to-one basis. It widens the participants' horizon and challenges anyone who believes they hold the single truth

on an issue. The strength of Future Search is that it builds understanding and a sense of community where there was division and indifference prior to the conference.

One of the central weaknesses of the Future Search Conference according to the empirical evidence presented above is that it is rather ill-designed to facilitate concessions from powerful sectors. Instead, Future Search facilitates the lowest common denominator – an outcome that does not hurt the interests of any party to the conference, which makes it in many ways unthreatening. The effectiveness of a Future Search Conference therefore crucially depends on the cooperation of the powerful and their willingness to take Future Search outcomes forward. Finding constructive ways of engaging those who may feel that their power base is threatened by the Future Search exercise, is therefore a key condition for success of a Future Search Conference. For the case of Local Agenda 21 and the cause of sustainable development, there may be cases where conflict strategies based on social movements, boycotts or direct action are preferable strategies for pressure groups to further sustainable development than to adhere to the ideals of collaborative planning theory (Flyvbjerg, 1998; Tewdwr-Jones & Allmendinger, 1998). For issues involving conflicting interests, mediation might be a more promising method to use.

While the contribution of community-based Future Search Conferences to capacity building for democracy should not be discounted, the two investigated case studies have certainly given much reason to conclude on a word of caution. As the case study material presented above has shown, the outcomes of both Future Search Conferences never even made it to the decision-making stage. Action groups proved unable to sustain themselves and to win wider support. The key reason was the missing link between the institutions of participatory and representative democracy. Successful Future Search applications will therefore require a distinct move to power sharing and institutional innovation at the interface between formal and informal structures of governance. In the absence of such changes, the outcomes of Future Search Conferences in particular, and collaborative planning practices in general are destined to remain little more than castles in the air.

The challenge of bringing issues of power, democracy and sustainable development together has most recently been addressed in the field of transition management, reflexive governance for sustainable development and work on discursive politics (Fischer, 2003; Voß, Bauknecht, & Kemp, 2006). New ideas for overcoming the problems of participatory processes employed for sustainable development are being developed there.

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References

Barber, B. R. (1984). *Strong democracy*. London: University of California Press.
Blaug, R. (1996). New developments in deliberative democracy. *Politics, 16*(2), 71–78.

Bunker, B. B. & Alban, B. T. (1997). *Large group interventions: Engaging the whole system for rapid change*. San Francisco, CA: Jossey-Bass.

Chess, C. (2000). Evaluating environmental public participation: Methodological questions. *Journal of Environmental Planning and Management, 43*(6), 769–784.

Durant, J. (1995). An experiment in democracy. In S. Joss & J. Durant (Eds.), *Public participation in science. The role of consensus conferences in Europe*. London: Science Museum with the support of the European Commission Directorate General XII.

Fiorino, D. J. (1990). Citizen participation and environmental risk: A survey of institutional mechanisms. *Science, Technology & Human Values* (15), 226–243.

Fischer, F. (1993). Citizen participation and the democratization of policy expertise: From theoretical inquiry to practical cases. *Policy Sciences, 26*, 165–187.

Fischer, F. (2003). *Reframing public policy. Discursive politics and deliberative practices*. Oxford: Oxford University Press.

Flyvbjerg, B. (1998). *Rationality and power: Democracy in practice*. London: University of Chicago Press.

Forester, J. (1989). *Planning in the face of power*. Berkeley, CA: University of California Press.

Healey, P. (1997). *Collaborative planning. Shaping places in fragmented societies*. Basingstoke, UK: Macmillan.

Helling, A. (1998). Collaborative visioning: Proceed with caution! Results from Atlanta's Vision 2020 Project. *Journal of the American Planning Association, 64* (3), 335–349.

Innes, J. E. (1996). Planning through consensus building. A new view of the comprehensive planning ideal. *Journal of the American Planning Association, 62* (4), 460–472.

Joss, S. (1995). Evaluating consensus conferences: Necessity or luxury? In S. Joss & J. Durant (Eds.), *Public participation in science. The role of consensus conferences in Europe*. London: Science Museum with the support of the European Commission Directorate General XII.

Kuper, R. (1997). Deliberating waste: The Hertfordshire citizens' jury. *Local Environment, 2*(2), 139–153.

Levett, R. (1997). Tools, techniques and processes for municipal management. *Local Environment, 2*(2), 189–202.

Lincoln, Y. S. & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. In D. D. Williams (Ed.), *Naturalistic evaluation. New directions for program evaluation. no.30*. San Francisco, CA: Jossey-Bass.

Meadows, D. H., Meadows, D. L., Randers, J., & Behrens, W. (1972). *The limits to growth*. London: Earth Island.

New economics foundation (1998). *Participation works! 21 techniques of community participation for the 21st century*. London: New economics foundation.

Oels, A. (2000). 'Let's get together and feel alright!' Eine kritische Untersuchung von 'Agenda 21'-Prozessen in England und Deutschland. In H. Heinelt & E. Mühlich (Hrsg.), *Lokale 'Agenda 21'-Prozesse*. Opladen: Leske und Budrich.

Oels, A. (2002). Investigating the emotional roller-coaster ride: A case-study-based assessment of the future search conference design. *Systems Research and Behavioral Science,* 19: 347–355.

Oels, A. (2003). *Evaluating stakeholder participation in the transition to sustainable development. Methodology, case studies, policy implications*. Münster, Germany: LITVerlag.

Oels, A. (2006). Evaluating stakeholder dialogues. In S. Stoll-Kleemann & M. Welp (Eds.), *Stakeholder dialogues in natural resources management. Theory and practice*. Berlin: Springer.

Oppermann, B. & Langer, K. (2002). *Die Qualität partizipativer und kooperativer Projekte in der Technikfolgenabschätzung*. Arbeitsbericht der Akademie für Technikfolgenabschätzung Nr. 226, Dezember 2002. Stuttgart: Akademie für Technikfolgenabschätzung in Baden-Württemberg.

O'Riordan, T. & Voisey, H. (Eds.) (1998). *The transition to sustainability. The politics of Agenda 21 in Europe*. London: Earthscan.

Polanyi, M. F. D. (2002). Communicative action in practice: Future Search and the pursuit of an open, critical and non-coercive large group process. *Systems Research and Behaviour al Science, 19*(4), 357–366.

Rossi, J. (1997). Participation run amok: The costs of mass participation for deliberative agency decisionmaking. *Northwestern University Law Review, 92*(1), 173–249.

Rowe, G. & Frewer, J. L. (2000). Public participation methods: A framework for evaluation. *Science, Technology & Human Values, 25*(1), 3–29.

Selle, K. (Ed.) (1996). *Planung und K ommunikation. Gestaltung von Planungspr ozessen in Quartier, Stadt und Landsc haft. Grundla gen, Methoden, Pr axiserfahrungen*. Wiesbaden, Germany/Wien: Bauverlag.

Senge, P. M. (1998). *The fifth discipline. The art & practice of the learning organization* (reprint of the 1993 edition). London: Century Business.

Stake, R. E. (1994). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research*. London: Sage.

Street, P. (1997). Scenario workshops: A participatory approach to sustainable urban living? *Futures, 29*(2), 139–158.

Tewdwr-Jones, M. & Allmendinger, P. (1998). Deconstructing communicative rationality: A critique of Habermasian collaborative planning. *Environment and Planning A, 30*, 1975–1989.

Tewdwr-Jones, M. & Thomas, H. (1998). Collaborative action in local plan-making: Planners' perceptions of 'planning through debate'. *Environment and Planning B: Planning and Design, 25*, 127–144.

United Nations (1992) *Agenda 21*. New York: UN publication.

Voß, J-P., Bauknecht, D., & Kemp, R. (Eds.) (2006). *Reflexive governance for sustainable development*. Cheltenham, UK: Edward Elgar.

Webler, T. (1995). 'Right' discourse in citizen participation: An evaluative yardstick. In O. Renn, Webler, T., & Wiedemann, P. (Eds.), *Fairness and competence in citizen participation. Evaluating models for environmental discourse*. Dordrecht, The Netherlands: Kluwer.

Weisbord, M. R. & Janoff, S. (1995). *Future search*. San Francisco, CA: Berrett-Koehler.

Weisbord, M. R. & Janoff, S. (1996). Future search: Finding common ground in organizations and communities. *Systems Practice, 9*(1), 71–84.

Wheatley, M. J. (1992). *Leadership and the ne w science: Learning about or ganization from an orderly universe*. San Francisco, CA: Berrett-Koehler.

Wilcox, D. (1994). *The guide to effective participation*. Brighton, UK: Delta.

Yin, R. K. (1994). *Case study research: Design and methods*. 2nd ed. London: Sage.

Chapter 6
Participatory Decision-Making for Sustainable Consumption

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6.1 Introduction

This chapter concerns the impact of public involvement in public decision-making processes as related to household consumption patterns, and the impact on consumer behaviour of active participation.[1] The call for participatory decision-making is common in the field of sustainable consumption (Murphy & Cohen, 2001). Implicit in many of these calls is the assumption that increasing the awareness and engagement of the public in decision-making processes for environmental protection will, ultimately, strengthen that protection. A second assumption is that public participation may also result in behavioural change by consumers. At a minimum there is the hope that an engagement of consumers will mean a greater awareness by consumers of the environmental impact of their purchases and behaviour (Barry, 2006). From a functional perspective there is the idea that the active participation of the consumer/citizen in public decision-making processes, as one of several 'stakeholders' or 'partners', could lead to alternative developments in sustainable consumption patterns.

In the 1980s, the dominant environmental protection philosophy focussed to a large degree on the emissions of harmful substances from factories, and how to

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[1] This chapter builds on material collected for a paper for the OECD (Coenen, Huitema, & Woltjer, 2002)

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reduce such emissions. Given the fact that much has been achieved along this line, and that emissions from production processes have been drastically reduced there is a logical shift towards the products themselves. Therefore there is focus change on to consumer products, and the accompanying disposal of waste, as a major source of environmental problems. This view brings the individual consumer into a much more important position. In many countries, concern about sustainable consumption has grown during the 1990s (e.g. UN, 1998). In line with the Brundtland (WCED, 1987) definition of sustainable development, sustainable consumption can be defined as the use of goods and services that respond to basic needs and bring a better qualify of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations (Norwegian Ministry of Environment, 1994). Sustainable consumption is closely related to sustainable production. Unsustainable consumption is either directly or indirectly related to many environmental problems. Directly because consumption itself pollutes, and indirectly through the production and disposal of consumer articles. This results in three different perspectives on the need for change in sustainable consumption (Hille, 1995):

– Reducing the use of natural resources by making production technology more efficient
– Reducing consumption in an economic sense, that is reducing the number and amount of goods and services measured in economic terms
– Allowing the level of consumption to continue to increase, but in addition striving for more efficiency in production, and shifting the pattern of consumption to less environmentally-harmful products and services

Agenda 21 (1992) introduced the concept of "*consumer and production patterns*" (Agenda 21, Chapter 4): "*To achieve sustainable development and a higher quality of life for all people , States should r educe and eliminate unsustainable patterns of production and consumption and pr omote appr opriate demo graphic policies .*" Since Rio there have been six international conferences on this subject which have gradually led to both the composition and the level of consumption and production becoming subjects of discussion.

Many countries have in place, or are developing, a broad range of policies to modify unsustainable patterns of consumption and the behaviour of individual consumers (Bentley, 2004; OECD, 2002). Government actions to change consumption patterns can be taken on the national and the regional/local government levels. Initiatives to influence consumption patterns make use of a range of instruments including regulation and economic instruments. Participation is strongly correlated with the use of so-called social instruments, which include instruments such as awareness raising campaigns, education and learning initiatives, information and labelling schemes, and voluntary agreements.

This chapter focuses on the impact of public involvement in public decision-making processes related to household consumption patterns on the effectiveness of the decision-making. We pose two questions:

– Can public participation in sustainable consumer-oriented policies enhance the quality of decision-making?

– What participation limitations and institutional arrangements affect effective decision-making in public participation in sustainable consumer-oriented policies?

The chapter first discusses the potential role of participatory decision-making for sustainable consumption policies. In Section 6.3 we discuss the general and specific limitations of participatory decision-making in sustainable consumption-oriented policies. Section 6.4 explores four examples of the use of participatory decision-making mechanisms to address environmental problems related to household consumption patterns. On the basis of these four examples, we discus in the concluding section the contribution of public participation in sustainable consumer-oriented policies to the quality of decision-making and the limitations of this participation.

6.2 Motives for Participatory Decision-Making in Sustainable Consumption Policies

Arguments for participatory decision-making in household consumption-oriented policies relate to three categories of general arguments for public participation as discussed in the introduction chapter. In the first place, participation will increase the legitimacy of decisions taken, and reduce the level of conflict. Participation in the development of national and local consumer-oriented polices is functional for both the policies and for the consumer involved as a participant. It offers the possibility of articulating the interests of the different stakeholders. For sustainable consumption policies the capability of achieving support and acceptance of a policy amongst the participants involved through participatory decision-making is particularly important. First, because implementing sustainable consumption policies involves many stakeholders, such as industry, retail businesses, and banks, and not least the consumers themselves, who have to take the final decisions to produce, offer, or buy, sustainable products. Secondly, particularly in policies that aim to change consumption patterns, for instance reducing car-use, acceptance of the policy by the consumers is crucial. This is not merely a question of raising awareness through participation, but also of seriously taking into account the feelings of people about these issues.

The second argument for participation, discussed in the introductory chapter, is that it contributes to the quality of decision-making. Participation gives government information necessary for decision-making, contributes to the systematic identification of problems and their causes, and the consideration and assessment of alternative strategic options. Consumers can play a role as co-producers of policy. As a citizen, the consumer can influence the political system, making use of direct and indirect democracy to bring and keep sustainable consumption on the political agenda. Sustainable consumption requires policies in many areas (legislation, taxation, development of better products etc.). Consumers can identify options based on local knowledge. Consumers are also co-producers of policy through their influence in the market system, making use of the mechanism of consumer power. Consumer power involves large numbers of consumers making the same environmentally-friendly choices at the same time, and has two effects. Firstly, it gradually eliminates

products which are environmentally unfriendly. Secondly, it will create a demand for more environmentally-friendly alternatives. These two arenas, the market and politics, are interrelated because a consumer movement within the market can be picked up by the political system and translated into government action.

The third argument is that, through participation, people will learn of the environmental problems that society faces (e.g. due to unsustainable consumption). The hope is that active participation will not only raise awareness but also have an impact on consumer behaviour.

6.3 Limitations of Participatory Decision-Making in Sustainable Consumption Policies

In the introductory chapter a number of the limitations of participatory decision-making procedures were briefly introduced. Many of the general limitations of participatory decision-making also apply to participation in sustainable consumption policies, such as:

Capacity requirements: Participation can be a time-consuming process. It asks, from participants, time and resources. Constructively commenting on proposals requires a variety of 'skills', and the ability to formulate alternatives and counter arguments.

Management of expectations: There is a tension between participation and representative democracy. Participants want to believe that their participatory input will have consequences in decision-making. On the other hand, civil servants and politicians do not always have high expectations of the value of participants' input.

Representativeness: Participation seldom represents a genuine cross-section of the community. One could be worried about specific groups such as minorities, the poor, youth, and the aged or about the lack of business involvement, or the over-representation of environmental NGOs. This raises issues concerning tensions between participatory and representative democracy.

There are also limitations that are specifically related to the type of decisions made in sustainable consumption policies. Particularly, where these decisions frequently meet a lack of government power to carry out final decisions, concern abstract or strategic issues, involve social dilemmas and deep-seated societal norms, and run the risk of unsustainable outcomes

Participatory decision-making in sustainable consumption policies is limited without *government power to carry out final decisions*. Many decisions in the field of sustainable consumption are private decisions, and only if government has some form of responsibility over these decisions can they be subject to indirect participation.

In general, it is difficult to get citizens and interest groups involved in *abstract, strategic, issues*. Many decisions in sustainable consumption policies are about strategic goals, norms and values, where it is not clear what is at stake for the consumer and stakeholders, or where the issue is not of immediate interest to citizens and interest groups. The difficulty of involving citizens in strategic policy-making is

often a reason for government agencies to limit their participatory decision-making process to operational details such as the payment system for drinking water, or the type of building materials to be used in sustainable housing. Further participatory decision-making on strategic issues requires knowledge and time generally not available to individual citizens. There are arguments advanced that participation in strategic decision-making could also be important for consumers. These often claim that fundamental choices determine people's consumption patterns in the longer term. At the strategic level alternatives are still open. For instance, the choice of an energy infrastructure for a new housing area defines future operational choices, such as not being able to cook using gas. It can be argued that fundamental decisions at this level specifically need public support.

Social dilemmas are of particular relevance to sustainable consumption. Many decisions to consume may be very rational from the perspective of the individual consumer but not from collective interests with respect to sustainable development and the prevention of environmental degradation. To overcome social dilemmas, representative governments may sometimes have to intervene in favour of the collective public interest. In a decision-making process, people may consider the collective interest but, when actually asked to contribute, put self-interest first. Moreover, a common problem related to participatory decision-making for sustainability is that future generations can never directly participate. Participatory decision-making will, therefore, very easily exclude their interests. Clearly, in social dilemma situations, or situations in which weak interests require special protection, collective interests cannot be protected by a participatory approach alone. A further limitation of participatory decision-making in sustainable consumption policies is that they often include *deep-seated societal norms* (e.g., nuclear energy, genetically modified food). Often governments try to avoid these more difficult or innovative areas of sustainable consumption, and restrict participation to non-controversial and positive themes and issues with a low potential for conflict.

The relationship between effective participation and decision quality is not self-evident. Participatory decision-making may be effective in terms of transparency, better information, more control, and the inclusion of local knowledge and creative ideas. An effective decision-making outcome does not, by definition, imply that this outcome is more sustainable or even environmentally friendly. Sustainable consumption issues often refer to long term impacts, and to impacts for large, cross-boundary geographical areas. It requires consideration of the consumption possibilities for other world citizens, particularly in less-developed countries, and for future generations, to consume equally.

6.4 Case Study Examples

This section explores four examples of the use of participatory decision-making mechanisms to address environmental problems related to household consumption patterns. For each case example we describe briefly the policies, the policy-design process, and the impact of the participatory mechanism on the process. Examples of

more sustainable household consumption patterns in these examples concern reducing mobility and using more sustainable modes of transport, buying environmentally friendly goods from environmentally friendly production processes, buying organically grown food, and reducing water use. Consumers play different roles in these cases. They are a target group that can be mobilised, a societal stakeholder, but also co-producers of policy.

6.4.1 Citizen Participation in Urban Transport Planning

The growth in the mobility of people and goods is a serious threat to sustainable development. Particularly in urban areas, car traffic causes air and noise pollution problems, and consumes much energy and public space. City inhabitants, commuters, business travellers, freight traffic and visitors are all consumers of the transport system (Batheram, Hardin, & Whitfield, 2005). This transport system can be more, or less, sustainable depending on the mode of transport. Urban transport planning is difficult because often unpopular actions seem necessary in order to keep cities clean, quiet, accessible, endurable, and in the end sustainable (Bickerstaff, Tolley, & Walker, 2002). Support by the general public for changes in the system, since in the end they are all consumers of the system, is necessary because it affects day-to-day life through choices in mobility.

In the Dutch, medium sized city of Groningen an open planning process for urban transport was undertaken from November 1995 to May 1997. Several studies have documented this process (Paf, 1997; Welles, 1997; Woltjer, 1998; Seip & van Vliet, 1998). One of the motives for the city starting a new planning process was the outcome of a referendum on the closure of a particular road. It appeared that many citizens were opposed to this particular road closure because of their general discontent with the traffic policy of Groningen. There was fear of a general lack of support for a new traffic plan. So the city decided to update its traffic policy with broad participation by the population.

The planning process was subdivided into three phases. The first phase (November 1995–March 1996) was an exploration of problems and solutions. To gain insights into the problems with traffic and transport policy, a telephone survey among 600 respondents, and a questionnaire distributed through a local newspaper, with 5,000 respondents, was used. Two round table discussions were held in order to present the result of the surveys and the initial conclusions over the main problems to which all inhabitants of Groningen were invited. In 18 working groups, involving 300 participants, the problems were analysed and possible solutions developed. The second process phase (March 1996–June 1996) elaborated policy directions. The working groups from the first phase evolved into four workshops. Participants from the working groups formed these workshops together with traffic experts and representatives of pressure groups. In each workshop various interests were represented and the workshops led to four policy directions, or models:

– Pro-car ‘full room for the car’
– Selective car use
– Collective transport and priority for bicycles
– The real alternative, complete emphasis on public transport

These four alternatives were assessed by experts for their effects on mobility, spatial planning, the economy, and the environment, and their technical feasibility and costs. The assessed policy directions formed the basis for the municipality's draft vision of traffic policy.

The third phase (June 1996–May 1997) was the decision-making phase. The decisions had to be taken by the local politicians, but in this phase citizens were also actively involved. The public had the opportunity to react to the ideas contained in a concept vision of the city council by sending in their reactions. Further, support for the concept plan was measured through another questionnaire among the respondents to the first survey in November 1995. The survey and written reactions were used to distillate the main problems that were then discussed in two public debates in the autumn of 1996. The results from the debates and the survey were used to prepare a concept traffic plan. At the start of November 1996 the concept traffic plan entered the legally required participation procedure. In May 1997 the plan was accepted by the city council.

During the whole process, general information was provided for the inhabitants of Groningen through a series of door-to-door information bulletins and through articles in the local newspaper. If we look at the policy impacts, mainly they are that the commuters to the city should travel in a more sustainable way. They are expected to use public transport and bicycles to go to work. Economically important traffic (freight and business traffic) gets full access as do people who want to shop by car.

6.4.1.1 Discussion

The purpose of participation in the Groningen traffic planning process was to raise the legitimacy of decisions taken, and to reduce the level of conflict on traffic policy. It offered the possibility of articulating the interests of all stakeholders and citizens. In practice, the participation process gave government the necessary information for decision-making, particularly in problem and cause identification, and in developing alternative solutions. An outcome of the process was that the participants learnt more about the environmental traffic problems that their city faces. In the Groningen example, citizens could put forward proposals but they did not have the authority to decide on policy. The scope of the participation process was the full range of traffic policy issues, and not just sustainable modes. The decisions in the end were taken using representative democracy.

Throughout all the planning phases the public were involved. The large number of people that participated is remarkable. The municipality received nearly 10,000 suggestions on how to deal with the traffic problems from about 6,000 respondents. Also the citizens that were not directly involved were well informed about the process through the information bulletins.

Given the many opportunities that citizens had to formulate their discontent with the traffic policy, one would expect that a large element of the frustration felt about traffic policies by the inhabitants of Groningen would be removed. It was expected that the participation process would raise support for the new

policy. An indicator of this support is that the official public enquiry procedure was relatively short, and no major adjustments were made. After the process, in a separate research project, the participants were questioned about their satisfaction with the process (Paf, 1997). Many participants were reasonably satisfied with the final result. The research showed that people gained more insights into the traffic problems, and their difficult solutions. Given the fact that the local council was also satisfied one could call the Groningen process a success. Still, there are two points of criticism on the process we could raise. Firstly, the representativeness of those involved in the process. Secondly, one could criticise the impacts of the participation.

The participation process was not representative of all users of the transport system. The problem was that all inhabitants of Groningen are consumers of the urban transport system, but that not all consumers are citizens. About half of the working population commute from outside the municipality. Furthermore, the city is the important regional shopping centre attracting a lot of visitors. Only about 20% of the participants in the open planning process were from out of town, most of the commuters and visitors did not participate.

Despite the large number of participants as a consequence of the organisation of the process, only a small number of people were involved in the second phase. In addition, in this second phase, only a small number of the participants in the workshop were individual inhabitants. Participants were largely drawn from organised interest groups (40%), experts (20%), or members of political parties (20%).

If we look at the background of the participants we can distinguish between ‘active participants’ (members of the workshops) and less-active participants. From the research (Paf, 1997) it appeared that both groups were representative in terms of ages. The group of less-active participants was also representative in terms of education. However, in the group of active participants, those with a higher education (university, professional education) were over-represented (62.7% compared with 48% nationally).

Several potential barriers can be identified that could have led to this over-representation. In the first place, the total process took 18 months. Some people dropped out of the participation process and lost interest. Secondly, there is the problem of information overload. The participants judged the quality of information as good, but sometimes the amount of information was excessive. This could have discouraged participants during the process, especially lower-educated ones.

The Groningen example illustrates the tension between participatory decision-making and representative democracy. This tension results from the expectations of the citizens that they will have real influence in decision-making. In the end, many participants felt there was somehow a gap between the participation process and the process of real decision-making. However, the survey afterwards showed that most participants said they would participate in new open planning processes in the future. One problem was that the open planning process preceded a formal legal procedure. In this legal procedure the local council was a key actor. This touches on the issue of institutionalisation of participatory decision-making in legislation.

The other side of the coin is that an internal evaluation showed that civil servants and planners had their doubts about the process from the start. They were afraid that an open planning process would lead to an inferior and immature outcome.

The Groningen process resulted in a plan with proposals for a light rail system, car parks outside the city centre, and a cycle path system. The participation process was a success since the new traffic plan for Groningen did include many of the ideas and contributions of participants and the results of the discussions. The case also shows some drawbacks with a participatory approach. One of them is that highly educated people tend to be over-represented in the group of active participants. Another drawback is that, perhaps due to the broad participation of citizens and interest groups, the plan is a compromise between many different interests and not the most sustainable option. Apart from this, however, the main results of participation in the decision-making process may well be the support given to the proposals, especially amongst interest groups and government bodies.

6.4.2 Generating Local Community Initiatives in Sustainable Consumption: Local Agenda 21 and Sustainable Communities

The second example we describe here deals with the way local communities can generate initiatives concerning sustainable consumption. All over the world local communities are taking initiatives, either under the flag of Local Agenda 21 (LA21), or simply autonomously striving to become a more sustainable community (Lafferty, 2001). All these initiatives have in common that they try to combine new governance and participation structures with local sustainable policies. As an example of a sustainable community, and an LA21 initiative in the field of sustainable consumption we will describe the Danish case of Albertslund, one of the best known pioneering municipalities in terms of LA21 (Holm & Mabui, 2001; Norlans et al., 2003). ‘Local Agenda 21’ refers to the general goal set for local communities by Chapter 28 of the ‘action plan for sustainable development’ adopted at the Earth Summit in Rio in 1992. Nowadays more than 6,000 municipalities all over the world have started an LA21 process. Many municipalities address sustainable consumption as part of their LA21 process.

The Albertslund Municipality has approximately 30,000 inhabitants and is located in the western suburbs of Copenhagen; it is a new town that was founded in the 1960s. Due to its social democratic political orientation, since the 1970s, Albertslund has attracted a particular kind of environmental conscious resident. A consequence is that since the 1970s many citizens have been involved in environmental protection issues. A survey showed that 94% of the local residents were willing to pay 1,000 Danish kroners more in tax on top of the conventional tax (60%) if it was showed that the money would be used, exclusively, to improve the environment in the municipality.

This environmental activism is related to a general feeling of common ownership and responsibility in all community matters. This was the basis for the strong tradition of dialogue and co-operation between the administration, local stakeholders, citizens, and politicians. Public involvement is organised through non-binding direct public involvement, where citizens contribute in public commentary periods, open meetings, citizen advisory commissions and through binding direct policy-making within structures overseen by elected or appointed officials. One example of the non-binding involvement is the User Group in which each village is represented which was formed in 1980. The Group expresses its opinion on all matters of environmental significance before they are presented to the Municipal Council. The User Group is one of the driving forces in the Agenda 21 work. The central actor in Albertslund LA21 is the "Agenda Centre Albertslund" which was formed in 1996 as an independent institution with its own board. It is financed by funds allocated by the User Group and by money from the City of Albertslund's ecological pool. The centre has two permanent project employees. Its primary task is to carry out LA21 plans with the individual housing area while also carrying out specific demonstration projects. An example of these projects is an organic garden project that cultivates, exclusively, organic crops.

Central to the Albertslund LA21 ideas are the environmental latitude (or environmental space) concept and the Green Accounts. Since 1992 the Municipality has tried to define its environmental space, for instance in terms of CO_2 emissions and the use of groundwater, as a basis for the LA21 objectives. The local Green Accounts quantify the municipal consumption of energy and resources. These Green Accounts have also stimulated local consumers to reduce resource over-consumption.

In planning LA21 initiatives, all interested and affected groups or persons were invited to express and define their targets. They were also encouraged to take part in the process of ensuring that these targets were achieved. The various LA21 plans that were made by the Albertslund Municipality contain intermediate and long-term goals. For instance, one intermediate goal is to reduce the consumption of groundwater by 35% by the year 2000, and the long-term goal is to reduce it by 70% by the year 2050.

Most municipal initiatives, given the lack of economic, judicial and legal support from the central government, rest on 'voluntary' or soft approaches (Holm & Mabui, 2001). The Municipality initiates customer or supplier requirements for environmentally friendly products in the value-chain, using direct economic incentives to local businesses. The Municipality gives procurement preferences to 'green' suppliers of food and office articles. These suppliers must assure and document responsible environmental management practices before the municipality will purchase or consume their products. Together with this, the suppliers must demonstrate a clear position in terms of environmental management practices throughout the products' production chain. As an example, a supplier must show that its suppliers, dealers, distributors, product packaging and waste management processes include careful environmental precautions throughout the products' production chain and processes.

Indirectly, the value-chain demand is influenced by encouraging local consumers to demand 'environmentally friendly' products. In principle, the Municipality hopes that, over time, through these activities, the end-use (local) consumers will choose 'green' products over their competitors, and in return that these market forces will provide an incentive to local firms and retailers to produce or sell environmentally friendly products. Other types of incentives rest upon positive and negative government incentives such as public recognition through awards, or public disclosure through reportage of the local environmental offenders in the local newspaper. For example, every third month, the Municipality reports all environmental offenders in the local newspaper's 'dirty dozen list'. Awards of recognition are offered to the best environmental practitioners. For example, schools that have achieved an outstanding environmental performance are allowed to hang a Green Flag on the school building.

Further more, the municipality initiates public consciousness and awareness raising activities that it hopes will change the local public's behaviour and attitudes towards environmental problems. Examples are:

- 'Green' fairs and exhibitions in schools, institutions, etc. to promote the 'green' marketing of environmentally certified supplies and organically produced products
- Discussion campaigns about environmentally correct behaviour
- Conferences about the various LA21 Action Plans
- The use of the media to raise public awareness such as by disseminating information through the local newspapers, local newsletters and other in-house publications, arranging citizens meetings and door-to-door delivery of leaflets

Finally the Municipality tries to set a good example. For instance through a total ban on the use of pesticides on the Municipality's own land and green areas. All day-care and public institutions have been purchasing organic food while also using environmentally-friendly office articles.

6.4.2.1 Discussion

The Albertslund LA21 process served in the first place to articulate the interests of the different stakeholders. Specifically in the field of sustainable consumption initiatives, awareness raising and behaviour change was also an important aim. In theory, all citizens had the ability to put forward proposals, in practice many initiatives were made by the grass-root environmental organisations and the user-group. Much information is available about the consequences of polices for sustainable development through the use of the environmental latitude concept. In an LA21, all inhabitants of a community can participate. Through the user-group, indirectly, citizens have access to the decision-making process. In the LA21 process the aim is that decisions are based on consensus resulting from dialogue in the community.

The Albertslund Municipality set out to make the municipality a Sustainable City in the 21st century. According to the Municipality they have achieved considerable success. For instance, in 1997, groundwater consumption had been reduced by

21%; and the consumption of pesticides had been dramatically reduced by 91%. The participation in LA21 was very broad, and nearly all inhabitants are aware of the LA21 process and the underlying plans. Environmental grassroots organisations play an important role in the LA21.

How important was participation in this reduction in consumption? Public participation has provided useful data and more information in the formulation of the respective LA21 plans, while local grassroots organisations have been active in the planning, formulation and implementation of the LA21 plans. Given the fact that the Municipality had to rely heavily on soft regulations, some of the successes are due to the involvement of citizens in the LA21 processes. These have influenced the publics' general attitudes to the environment and generated better dialogue among the citizens, stakeholders and the authority. It will always be an open question what would have been possible through the traditional command-and-control regulation or through 'pure' market-based instruments if the Municipality would have had the legal and economic possibilities.

Albertslund is an unique case in the sense that there is a relatively large number of 'gladiators' among its citizens. This provided a 'critical mass' for socio-political mobilisation and awareness with respect to sustainable policies.

6.4.3 Consumer Involvement in National Policy-Making

The third example we describe is the input by consumers in national policy-making. Contrary to the other examples, which all refer to geographically smaller areas and therefore a more limited number of citizens, it is more difficult to imagine how citizens can be directly involved in national policy-making. Traditionally, governments have relied either on focus groups, public advisory committees, or on opinion polls. How representative the citizens' input in all three methods may be, only a small number of citizens are really contributing. The use of new communications technologies in public involvement in policy-making, often referred to as digital government, can change this dramatically (Beierle, 2003; OECD, 2003; Schlosberg, Shulman, & Zavestoski, 2006; Shulman, Schlosberg, Zavestoski, & Courard-Hauri, 2003).

The example of participation in sustainable consumption-oriented policy we discuss here is the public comment the United States Department of Agriculture (USDA) sought on proposed national standards to govern the marketing of organic agricultural products (Shulman, 2000, 2003). On December 15, 1997, the USDA announced its so-called National Organic Program proposed rule on the Internet. Over the following months, the department received 275,000 comments by e-mail, fax and post.

The basis for this rule was the Federal Organic Food Production Act of 1990 (OFPA). In accordance with this act, the USDA was required to establish a National Organic Standards Board (NOSB) to assist in the development of food standards for substances to be used in organic production, and to advise the Secretary on any other aspects of the implementation of the chapter. The 15 member board was made

up of organic farmers, handlers, retailers, and certifiers, as well as environmental experts, public group representatives, and one expert grounded in toxicology, ecology or biochemistry. The NOSB was appointed in 1992 and spent 4 years consulting with the public and various stakeholders in the organic food industry, and prepared an elaborate set of recommendations for a national organic standard. The goal was to create a uniform set of guidelines so that US consumers purchasing food labelled organic would know precisely what farm practices went into the creation of the product. The NOSB report included guidelines for a national list of accepted and prohibited materials, pest control and fertilisation practices, and the feed and confinement of livestock.

When the NOP's initial proposed rule came out there appeared to be an inconsistency with the NOSB's recommendations that was criticised by both the US press and concerned scientists. Several practices that had been rejected by the NOSB after its extensive public consultation were included in this initial rule. The main problematic issues were irradiation, the use of sewage sludge as fertiliser, and the use of genetically engineered crops. Suggestions were made in the press and by scientists, that the department lent its ear to industry and political pressure by biotech firms, trade organisations and connections in other US federal departments. A research project (Shulman, 2000) analysed the responses to the NOP rule. The pilot sample of comments shows an almost unanimous rejection of the inclusion of the above three mentioned methods in the rule. People feared known and unknown health risks, and environmental impacts, associated with the processes. Further they saw a mismatch between these methods and the concept of organic food and feared the intrusion of big business in the organic sector.

On March 7, 2000 a revised rule was released, which had been modified in light of the 270,000 public comments. On the revised proposal an additional 40,774 comments were received, many of which were incorporated into the final rule.

The USDA suggests that the will of the people should set aside the authority of scientific discourse. Seemingly the USDA was well aware that biotechnology and irradiation were divisive issues. With the launch of the first proposed rule Secretary Glickman,[2] stated: *"It's a well known fact that the very best science has proven the products of biotechnology and the process of irradiation not only safe, but beneficial. I want to make clear that these rules are not about creating a category of agriculture that is safer than any other. We have one high standard for food safety in this country. Period. These rules are about giving consumers choices as to how their food is produced. I want them to be informed choices, but they are the consumers to make."*

The USDA itself states that the comments on the first proposal nearly universally opposed the use of genetic engineering, irradiation, and the use of sewage sludge in organic production systems. As a consequence these three methods were prohibited in the new rule, and therefore in the production of all organic foods. The argument for prohibition is not scientific. In fact the USDA states that there is no scientific evidence

[2] Remarks by Secretary Glickman on the proposed Organic Standards, December 15, 1997.

that the use of the excluded methods presents unacceptable risks to the environment or human health. In fact the USDA argues that these methods not only have been approved for use in general agricultural production, but they also may offer certain benefits for the environment and human health (USDA/AMS, Release No. 0074.00).

Despite the lack of scientific arguments, in the view of the USDA, the three methods should be forbidden in the new rule. The argument is that based on the overwhelming public opposition, consumers have made clear their strong opposition to the methods in organically grown food. Since the use of the methods in the production of organic foods runs counter to consumer expectations; foods produced with these methods will not be permitted to carry the organic label (USDA, TMD-00-02-FR).

Further the USDA noted that there is tension with other interests. For instance, for organic food processors, it may be harder to find sources of non-organic ingredients that are produced without use of the excluded methods. Similarly, certifying agents may face greater difficulty because they will be required to ensure that handlers have complied with this requirement. Despite these problems, the USDA believes that the need to meet strong consumer expectations outweighs these concerns (USDA/AMS, Release No. 0074.00).

6.4.3.1 Discussion

In the organic rule example, participation served in the first place the legitimacy of the rule and the reduction of the level of conflict. The decision-making process is about the acceptance of a concept rule. All US citizens could participate. Formally, the final decision is taken by means of representative democracy. In practice, representative democracy gave in to direct democracy because of the overwhelming opposition to the proposed rule.

Government agencies are increasingly deploying new technologies to improve citizen/government interaction in the hope that through means such as the Internet this interaction will become more open, efficient, and responsive (Beierle, 2003; OECD, 2003; Schlosberg et al., 2006; Shulman et al., 2003). Efficiency lies in standardised systems for gathering and analysing citizen input. In this case, all comments were scanned, entered into a database and made available on the Internet through a searchable Web interface. This electronic document management system eliminated the need to make three copies of each comment (one file copy, one working copy, and a copy for access in a public reading room). This saved the USDA $300,000 in copying costs and saved two employees from the tedious task of making those copies. Similarly, the USDA avoided the costs of setting up a reading room for the proposed rule by creating a virtual reading room on line. This also significantly reduced US Freedom of Information Act requests.

According to US government officials, an advantage over traditional participation methods is that the ease of submitting comments encouraged more people than

usual to participate, making USDA's National Organic Program the most open, publicly accessible rule-making the government ever ran.[3]

A question is what is the link with the media coverage and publicity for the input by the public. Further, adversaries of this type of democratic process would argue that these kinds of input underestimate the value of these technologies (Rowe, Horlick-Jones, Walls, & Pidgeon, 2005). It could even be seen as a capitulation to citizen demand based on the unscientific will of people.

The scientific question is whether GM produced or irradiated foods are less sustainable. The fact is that the larger public does not see them as healthy and safe food. This may be based on an incorrect fear of known and unknown health risks, but the participation process enables people to express their own choices (Frewer & Shepherd, 1998; Morkid, 2001). For the USDA the overwhelming opposition was the key argument to ban certain methods in organic farming despite their own belief that the scientific discourse on these methods does not back this prohibition.

6.4.4 Users Input to a Water Supply Strategy

The fourth example we discuss here has to do with the role of consumers as co-producers of policy. The ACTEW Corporation is responsible for the Australian Capital Territory's energy, water and sewage needs. The ACTEW worked in partnership with the communities it supplies to develop a detailed Future Water Supply Strategy. The underlying idea behind community involvement is that a water supply strategy involves choices that affect the lives of the members of the community (de Loë, Moraru, Kreutzwiser, Schaefer, & Mills, 2001). Therefore involvement of these communities in drafting a water strategy is important (Morisson, 2003). The Strategy describes where the communities want to be in the year 2040, and what steps will be needed to get there.

The community consultation process started with the launch of an issue document on the water future of ACT in early March 1993. On the basis of the discussion documents, both regional community workshops and specialist workshops were organised until the end of April 1993. Summary chapters were complied by the ACTEW on issues including education, pricing, regulation, alternative sources, and community consumption in July 1993. Through another round of workshops a draft strategy was prepared and released in December 1993. This draft strategy was again discussed in community and specialist workshops. ACTEW engaged a research firm, Quadrant, to analyse the community attitudes to the draft strategy. Quadrant organised a series of forums. In these forums facts were presented to the attendants, followed by the distribution of a questionnaire to test the reactions to and views on the facts being presented. The attendees were randomly selected using market research techniques.

[3] Gary Scavongelli, Agriculture associate deputy administrator for transportation and marketing programs (202), 690–1305.

These formal events give only a limited perspective of the participation process. Apart from the well-advertised open forum workshops, other strategies were used to actively approach the community:

- The issues were presented and discussed with a large range of community service clubs and organisations at their venues and meetings.
- ACTEW professionals were made available at convenient community venues such as the Canberra show and through static displays in shopping centres.
- Over 5,000 copies of discussion documents were distributed and wide-ranging media articles on the respective issues were released in all the consultation rounds.
- Reactions were made easier by including comment sheets and prepaid, pre-addressed, envelopes in all documents.

Earlier planning had indicated that, based on projections and consumption patterns, a new dam would be required around the year 2005. However the community showed a clear desire to defer the need for a new dam by strengthening demand management initiatives. ACTEW held numerous forums to achieve community involvement in, and ownership of, the Strategy, and documented the outcomes of the consultation process at critical points. ACTEW engaged a research institute to independently assess the community's acceptance of the proposed directions and to measure community reaction as the Strategy has developed. The market research work indicated very high levels of support (over 90%) for the overall directions of the Strategy.

In essence, the Strategy (ACT Electricity and Water, 1994) recommends that ACTEW should, on the basis of the community's clear desire to defer the need for a new dam, strengthen demand management initiatives where this is the least cost, most sustainable option for providing water in the future. Around 80% of the population felt that the construction of any additional dams should be delayed for as long as possible.

Secondly, education and awareness raising, pricing, regulation and innovation should be used as the primary methods of managing demand. One of the highest priorities, according to the market research, was in the area of education and awareness. Some 91% of the community believed that ACTEW's education and awareness campaign should continue, but a staggering 97% felt that this campaign needed reorientation so as to focus on 'how to save' aspects. ACTEW's education and awareness programme should be redeveloped and resourced to be an effective demand management tool, focusing primarily on advice to consumers about 'how to save water'.

Thirdly, the ACT's water pricing structure should be reformed by ACTEW to provide a more equitable and efficient system. Market research indicated that some 92% of the community wanted a conservation message in any ongoing water pricing system for the ACT. 88% felt that the pricing system should also meet all financial and environmental costs associated with harvesting and delivering water. It should be based on the key principles that water should be paid for on the basis of use, and prices should reflect the true cost of water including environmental and conservation aspects within the community.

Water conservation targets of 15% by 2000, 25% by 2010, and 35% by 2020 were adopted by the community as a reflection of their desire to defer the need for a new dam. Further, the ACT adopted drought water restrictions on the basis of the

community's wish to adopt lower levels of supply security, and water restrictions in times of drought. 88% of the ACT community is prepared to accept drought water restrictions; this percentage rising to an even higher level for severe droughts. Also alternative water supply sources should be pursued, with research focusing on those sources that will lead to more efficient and sustainable water use through the avoidance of waste. The costs and benefits of each of these alternatives will need to be determined in prioritising source options.

6.4.4.1 Discussion

In the ACT example, participation served in the first place as a means to create support from the water-users for a water supply strategy and water measures for the future. Through the participation process, people learned about the consequences of the different choices and their own behaviour. Much information was offered to the participants about the options and consequences. The prepared future water supply strategy was presented as a decision based on consensus resulting from dialogue in the community.

It is clear that the participation process has made a difference. The basis for the future water policy under the influence of the public has become one of controlling water demand instead of building a new dam. Therefore significant water conservation is needed. Simple habit changes and the use of more water efficient appliances can lead to large consumption reductions. Also the will of people is needed to accept alternative water sources and restrictions during periods of drought.

Significant reductions in actual consumption have already been registered. For example, a maximum daily consumption of 378 Ml/day was recorded during the summer of 1993/94, although weather-corrected models indicated that a consumption of 550 Ml/day should have occurred based on previous ACT and Queanbeyan consumption patterns. If these current reductions in the ACT are maintained in the longer term, and staged water restrictions are implemented during more severe droughts, it is expected that the need for a new dam can be deferred. It is difficult to prove but the involvement of the communities in the drawing up of the strategy, and their support for the strategy, seems to contribute to the awareness of water use and the will of consumers to make reductions.

An important lesson to be drawn from this case is the active approach of the community. Apart from more traditional elements of participation, the ACTEW entered the daily social environment and activities of people (clubs, shopping malls, fairs) to actively involve people.

6.5 Conclusions

This concluding section summarises findings on key issues for effective public engagement in decision-making processes related to household consumption patterns and discusses the limitations and possibilities for participatory decision-making.

6.5.1 Does Public Participation in Sustainable Consumer-Oriented Policies Enhance the Quality of Decision-Making?

The cases illustrate that participatory decision-making can contribute to the quality of decision-making. It provides the decision makers with information necessary for decision-making, for example data useful in the formulation of LA21 plans. It contributes to the systematic identification of problems and their causes, for instance about the consequences of water supply. Water use in a city could have effects in regions far away from the city, especially through the building of environmentally damaging dams. Participatory decision-making also contributes to the consideration and assessment of alternative strategic options, such as different policy directions in traffic planning. Finally it increases the public acceptance, and support and awareness, of the problems society faces. For instance, water demand cannot be regulated without the involvement of the water user. Water savings cannot be achieved by price setting alone. There is a need for individual behavioural change, which in the end means linking the effects of individual behaviour to the problems that society faces.

All four examples illustrate, in different ways, the possibilities of linking participatory decision-making to greater consumer environmental awareness and behavioural change. Initially the participation processes raised awareness of the nature of the environmental problems created by a particular form of consumption. In the urban transport example, a later survey of the participants showed that they had more understanding of (environmental) traffic problems and their solutions, and showed more support. In the ACT example the market research showed an understanding of the problems and their solutions.

Secondly, there are also signs of individual behaviour change. Most visible is the reduction in water use in the ACT example. It is expected that the whole discussion on organic farming, and the use of organic labels, will raise the market share of organic food in the US. In Albertslund, the willingness to pay extra taxes for the environment is an indicator of behaviour change. In general, support for previously unpopular measures could be seen as a form of behaviour change.

6.5.2 What Institutional Arrangements and Participation Limitations Affect Effective Decision-Making During Public Participation in Sustainable Consumer-Oriented Policies?

Some of the institutional factors, on the basis of the various rules we identified in the introductory chapter, seem to be particular important in the effectiveness of participation processes in sustainable consumer-oriented policies. Sustainable consumption policies raise many issues since they are linked with sustainable production and have many direct

and indirect impacts. The *scope* that the participatory decision-making is about, set by the authority rules, is therefore very important for the outcome of the process. For instance, in the case of Groningen, it was crucial whether participants decided about transport policy as a whole, or just between more, or less, sustainable modes of transport.

Another factor that strongly influences the effectiveness of participation processes in sustainable consumer-oriented policies is the *type of information* exchanged in the participation process. This information can range from factual information, as in the ACT case, to an exchange of information on perceptions and norms as in the organic food rule case. The knowledge that one wants to obtain can be lay knowledge, for example local information, or the opinions of citizens.

In sustainable consumption policies various consumers can represent very different interests. *Boundary rules* determine who participates. Therefore boundary rules also determine which interests are participating in the participatory decision-making. For instance, in the Groningen case, the boundary rules, in practice, stressed the participation of inhabitants, and less the role of the commuters.

The cases illustrate some of the potential limits to participatory decision-making that were discussed in Section 6.3 of this chapter.

Capacity requirements: All the cases show that participation is a time and resource consuming process. It is remarkable from the Groningen case that the participants did not see the information overload and time requirements as much of a problem, nor the duration of the total process. Capacity requirements are linked with institutional arrangements. In the Albertslund situation there is binding citizen involvement in policy-making, within structures overseen by elected or appointed officials. In overseeing and reacting to all proposals before they are passed on to the municipal council, it is probably unrealistic to rely on non-binding, ad-hoc participation by individuals. What, in fact, is created through the so-called user group is a new form of representative democracy, that is, at most, a form of more direct democracy. The two other cases illustrate that capacity requirements also depend on the participation mechanism chosen. The ACT case illustrates how a less traditional participation approach can be less demanding on citizens. The organic food rule illustrates that a relatively easy way of obtaining information and reactions through the Internet raises the number of participants that are involved quite spectacularly.

Management of expectations: The Groningen example typically illustrates the tension between participatory decision-making and representative democracy. The citizens expect real influence in decision-making, and then find out that decision-making is the responsibility of elected politicians. In the organic food case many commentaries raised questions about the influence of the NSOB board on the first proposed rule. In the end the overwhelming opposition had real influence on the final outcome.

Representativeness: The case examples illustrate the potential problems with dominant actors and *representativeness*. Although, in all cases, the number of participants was large compared too many other participation exercises, even over a quarter of a million reactions is but a fraction of the US population. The danger

of over-representation of ‘gladiators’ with a certain educational background, are present in all four examples. The ACT case shows that one can work on representativeness through the way one approaches the public. In the LA21 case, grassroots environmental actors played a dominant role, raising the danger of over-representation of certain interest groups (‘green ghetto’). An interesting aspect of the NOP rule case is the role of the media. The media can give room to certain opinions, for instance scientists, and less to others such as business interests.

On the basis of the case examples, the specific limitations that we had expected in participation in sustainable consumer-oriented polices, given the type of decisions involved, need nuancing. Even if many decisions in the field of sustainable consumption are private decisions, without *government power to carry out f inal decisions*, the cases show that private actors can seek the participation of end-users such as water consumers or work commuters in their policies. Private actors depend as much on consumer behavioural change as do governments. In the Albertslund case, innovative ways were used to influence business decisions, largely depending on consumer power.

Although, as a general rule, participatory decision-making is less suitable for directly involving citizens, or local interest groups, in abstract, strategic, problems which require a certain expert knowledge, the NOP case shows that successful participation is possible in a highly scientific situation. This was probably due to the large media attention and because of the relatively easy way in which participants could react to the proposal.

More important than expert knowledge could be the interest at stake for the consumers. In the urban transport system planning process, the water strategy, and the organic food rule, the stakes for the consumers are clear. It is about their own future mobility options, their own use and costs of water, and about the quality of their food and the reliability of the organic label. In contrast, in the LA21 case, the stakes for individual consumers are less clear. However, through the use of the environmental latitude concept, the use of clear quantitative objectives, and the monitoring of the results, these ‘stakes’ are made visible.

Further, all the cases present examples of *social dilemmas and deep-seated social norms*. Car mobility is a difficult issue for participation. The NOP case shows that even if a large part of the public has deep-seated societal norms and ideologies about what constitutes safe food, but there is willingness on the side of government to ignore their normative position, then the discussed methods of public participation can be useful.

Finally all the examples raise the question as to whether participation can lead to *more sustainable options*. In the Albertslund case, there is an attempt to search for objective sustainable development by using the environmental latitude concept and formulating long term goals based on this latitude. In the urban transport case it is doubtful if participation led to a more sustainable outcome. Forms of economically important transport, and even shopping, were spared from any extra burdens. Burdens were shifted to the commuters. On the other hand, participation can add to the definition of sustainable development. For instance, in the NOP rule case the discussion added to the definition of what the general public sees as organic food.

References

ACT Electricity & Water (1994). *ACT future water supply strategy, our water our future*. Canberra.

Barry, J. (2006). Resistance is fertile: From environmental to sustainability citizenship. In A. Dobson & D. Bell (Eds.), *Environmental citizenship*. Cambridge, MA: MIT Press.

Batheram, M., Hardin, J., & Whitfield, S. (2005). Successful participation methods for local transport planning. *Municipal Engineer, 158* March 2005 Issue ME1, 9–16.

Beierle, T. C. (2003). *Discussing the rules: Electronic rulemaking and democratic deliberation*. Washington, DC: Resources for the Future Discussion Paper 03–22.

Bentley, M. (2004). *Tracking progress: Implementing sustainable consumption policies* . A global review of implementation of the United Nations Guidelines for Consumer Protection (Section G: Promotion of Sustainable Consumption) UNEP and Consumers International, 2nd ed. 2004.

Bickerstaff, K., Tolley, R., & Walker, G. (2002). Transport planning and participation: The rhetoric and realities of public involvement. *Journal of Transport Geography, 10*, 61–73.

Coenen, F. H. J. M., Huitema, D., & Woltjer, J. (2002). *Participatory decision-making for sustainable consumption*. OECD, ENV/EPOC/WPNEP (2001)117, Paris.

de Loë, R. C., Moraru, L., Kreutzwiser, R. D., Schaefer, K., & Mills, B. (2001). Demand side management of water in Ontario municipalities: Status, progress and opportunities. *Journal of the American Water Resources Association, 37*(1), 57–72.

Frewer, L. & Shepherd, R. (1998). Consumer perceptions of modern food biotechnology. In S. Roller & S. Harlander (Eds.), *Genetic engineering for the food industry: A strategy for food quality improvement*. New York: Blackie Academic.

Hille, J. (1995). *Sustainable Norway. Probing the limits and equity of environmental space*. Oslo: The Project for an Alternative Future.

Holm, J. & Mabui, M. (2001). The participatory and consensus-seeking approach of the Danish LA21. In W. M. Lafferty (Ed.), *Sustainable communities in Europe*. London: Earthscan.

Lafferty, W. M. (Ed.) (2001). *Sustainable communities in Europe*. London: Earthscan.

Morkid, A. J. (2001). Consensus conferences on genetically modified food in Norway. In *Citizens as partners: Information, consultation and public participation in policy-making* . Paris: OECD.

Morrison, K. (2003). Stakeholder involvement in water management: Necessity or luxury? *Water Science and Technology, 47*(6), 43–51.

Murphy, J. & Cohen, M. (Eds.) (2001). *Exploring sustainable consumption: Environmental policy and the social sciences*. Oxford: Pergamon/Elsevier Science.

Norland, I. T., Bjørnæs, T., & Coenen, F. (2003). *Local Agenda 21 in the Nordic Countries – national strategies and local status*. Report 1/03. Oslo: ProSus.

Norwegian Ministry of Environment (1994). *Sustainable consumption symposium report*. Oslo.

OECD (2002). *Towards sustainable household consumption? Trends and policies in OECD countries*. Paris.

OECD (2003). *Promise and problems of e-democracy*. Paris.

Paf, R. (1997). *Roept u maar! Een onderzoek naar de meningen van deelnemers over een openplanproces in Groningen*. Master thesis, University of Groningen, Groningen, The Netherlands.

Rowe, G., Horlick-Jones, T., Walls, J., & Pidgeon, N. F. (2005). Difficulties in evaluating public engagement initiatives: Reflections on an evaluation of the UK "GM Nation?" public debate. *Public Understanding of Science, 14*(4), 331–352.

Schlosberg, D., Shulman, S. W., & Zavestoski, S. (2006). Virtual environmental citizenship: Web-based public participation in rulemaking in the United States. In A. Dobson & D. Bell (Eds.), *Environmental citizenship*. Cambridge, MA: MIT Press.

Seip, M. & van Vliet, R. (1998). *Urban transport planning: A case of participative planning in the city of Groningen.* Paper 12th Aesop Congres July 22–25, Aveiro.

Shulman, S. W. (2000). *Citizen agenda-setting, digital government and the national organic program*. Paper presented at the American Political Science Association, Washington, DC, August 31–September 3.

Shulman, S. W. (2003). An experiment in digital government at the United States National Organic Program. *Agriculture and Human Values, 20*(3), 253–265.

Shulman, S. W., Schlosberg, D., Zavestoski, S., & Courard-Hauri, D. (2003). Electronic rulemaking: A public participation research agenda for the social science. *Social Science Computer Review, 21*(2), 162–178.

UNCED (United Nations Conference on Environment and Development) (1992). *Agenda 21*. New York.

UN Commission on Sustainable Development (1998). *Consumer protection, guidelines for sustainable consumption*. New York.

WCED (World Commission on Economy and Development) (1987). *Our common future*. Oslo.

Welles, H. (1997). *Kwaliteit van het planproces Groningen*. Concept-tekst t.b.v brochure Platform Duurzaam Stadsverkeer, Ede.

Woltjer, J. (1998). *Interactieve Planvorming, inventarisatie en evaluatie van praktijk- initiatieven*; {Interactive plan-making: An inventory and evaluation of practical initiatives}. Report P99–004 of the Dutch Organisation of Applied Scientific Research (TNO), Delft, The Netherlands.

Chapter 7
Hazardous Waste Anyone?

A Comparison of Participatory and Non-participatory Approaches to Hazardous Waste Siting

Dave Huitema

7.1 Participatory Decision-Making and Decision Quality

7.1.1 Locally-Unwanted Land Uses: Acceptance and Decision Quality

This chapter is about locally-unwanted land uses, specifically hazardous waste treatment facilities. Finding a location for such a facility can pose various difficulties, not the least of which is the problem of gaining acceptance from surrounding communities. These often resent the idea of having a waste treatment facility in their area, a resentment that is labelled by the increasingly familiar term NIMBYism (Not In My Back Yard). It is exceedingly difficult to overcome negative community feelings, which are channeled through legal procedures and sometimes through extra-legal means ('siting gridlock'). These problems have received much attention in North America, but are certainly not unique to that continent (see for example Davy, 1997).

Over recent decades, a large amount of literature has been produced which discusses the causes of siting gridlock and offers advice on how to improve practice (see for example Portney, 1991; Rabe, 1994; Williams & Matheny, 1995; Bradshaw, 2003; Petts 2000, 2001; Watson and Bulkeley, 2005; Kuhn and Ballard, 1998; Lidskog, 2005). The causes of siting gridlock that have been identified revolve around multiple types of interrelated factors. They include the decline of deference to government (see for example Pushchak, 1998), a lack of trust in the institutions that make hazardous waste decisions (see for example Wynne, 1987), and changes in the perception of risks (see for example Slovic, 2001). Given the diversity in causes of siting problems, it is remarkable that the solutions generally centre on giving local communities a greater role in hazardous waste decision-making. This can be in the form of increased citizen participation in discussions on hazardous waste regulations or proposals for individual facilities (Williams & Matheny), or in the form of communities becoming

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F.H.J.M. Coenen (ed.), *Public Participation and Better Environmental Decisions*,

a party that negotiates compensation for damages (Inhaber, 1998). The terms used in describing such approaches include ‘voluntary siting’, ‘community-based siting’, ‘the compensatory approach’, and ‘hazardous waste auctions’.

The intended effect of such approaches seems to be primarily a greater acceptance of hazardous waste facilities. However, in my opinion, a focus solely on gaining acceptance is too narrow. One reason is that one cannot rule out the possibility that communities resist proposals for very proper and legitimate reasons. Proposals may, for instance, be ‘bad’ from a technical perspective. In a decision process solely geared towards gaining local approval, such information may be ignored. Also, a focus on community acceptance may imply that facilities will be commercially less successful. Further, what of the thought that acceptance by one community might be resented in neighbouring communities? I interpret such questions as indicative of a need to consider the outcomes of the more participatory siting processes in terms of ‘decision quality’. Since it is already clear from the above that several types of quality exist (e.g. social, technical, and commercial), I will first devote some attention to clarifying these.

7.1.2 Some Concepts of Decision Quality

I wish to make the point that there may be different ‘rationalities’ (see for example Diesing, 1962) involved in hazardous waste siting, with consequent differing concepts of quality. In order to realise this, one need only think about the various arenas in which decisions might be taken. Table 7.1 sums up some of the possible arenas, and the dominant forms of rationality in those arenas. Since it is difficult to make forms of rationality operationally measurable, I will merely give some rules of thumb.

As shown in Table 7.1, one possible arena for hazardous waste decisions is the free market. Placement of the decision in that arena implies that the parties who have ownership of the required resources are free to negotiate deals or exchanges between themselves. From this perspective, the fact that a contract has been signed is a sign that the outcome of the decision process is ‘good’. Especially if the facility consequently operates at a profit, it must have been rational to close the deal from a market perspective. Decisions may also be put to representative institutions. There are some that argue that this type of rationality, the political kind, is closely related to market rationality. They see politics as merely an exchange of interests (see for example Burnheim, 1995). This is a somewhat tenuous concept of the political process, but political rationality is indeed to some extent about trading interests. However, it is also about popular support and legitimacy: one must obtain this and try not to lose it. The right decision is one that receives much acclaim from the electorate. In many cases, siting decisions become subject of legal proceedings and then reach the court arena, the third possibility. A judge will decide the matter on the basis of what is legally right. The judge may apply certain ‘tests’ (e.g. was the procedure fair, is the decision not totally unreasonable) to see whether a certain decision was legally ‘right’. A fourth possibility is that decisions are left

Table 7.1 Types of rationality

Arena	Rationality (rule of thumb for measuring)
Free market	Economic rationality: agreement between free parties, profitability
Representative institutions	Political rationality: policy problems need to be resolved, preferably by solutions that can gain support from representative institutions and/or from the general public
Courts	Legal rationality: is the decision according to the law? Specifically: have correct procedures been followed (knowable in advance) and is the decision not obviously capricious?
Experts	Scientific rationality: is the decision acceptable on the basis of proven scientific facts (e.g. environmentally safe) and in the general interest (not too expensive given the benefits)?
Community	Social rationality: is the decision acceptable to members of the local community, is it in their interest, is there consensus on the decision?

to 'the experts'. There are of course many types of experts, but usually certain types of experts come to the fore when certain questions need to be answered (for example, in hazardous waste siting, a chemical engineer or an epidemiologist). This expert may be asked to advise a decision, one which is 'scientifically rational'. Very often, scientific rationality revolves around utility maximisation that is, creating as little risk as possible, with the lowest costs possible. Finally, it can be that a local community (at village or neighbourhood level) is involved in hazardous waste decisions. Local knowledge owned by the residents will be of great importance in determining their decision, as will the economic needs of the community. Some ('communitarians') argue that it is at this level that hazardous waste decisions should be taken.

7.1.3 The Importance of Formal Rules, and the Connection Between Procedure and Outcome

It is often said that judgements about the quality of decisions will be utterly dependent on one's perspective. If this is true, then the various people involved in hazardous waste siting will have different ideas of what the 'right' definition of quality in a decision process is. The scientist would devise a different approach to decision-making than the communitarian. In this sense, procedure and desired outcome are hard to separate (see also Hisschemöller, 1993). It is easily conceivable that ideas about the 'right' definition of quality have an impact on the way decision processes are structured. Debates between public officials, interest groups, and elected representatives, at the 'collective choice level,' will result in a certain preferred way of making decisions, expressed in procedures that need to be followed at the 'concrete choice level'. The type of decision quality (economic, social, legal, etc.) desired will influence the shape of the procedures. So, if the lawmakers prefer a technically optimal decision, they are likely to attach great

value to the generation of technical data during the decision process (information rule) and the involvement of technical experts in the decision (boundary rules). From a larger study, from which I am extracting here, that focuses on the UK, Canada and the Netherlands, I conclude that legislation in these countries emphasises the technical and economic quality of decisions. This is a reflection of the fact that the countries are 'polyarchies' (Dahl, 1989) with an important role for the private sector. Regulations are seen as constraints on free market parties. They are generally only accepted if the argument can be made that such regulations would enhance economic growth and are technically feasible.[1]

7.1.4 A Scale of Participation

Being interested in the connection between participatory approaches to decision-making on the one hand and decision quality on the other, there is a need to develop a scale for measuring the degree to which decision processes are participatory. For this purpose, I have opted to use a scale that was used previously to measure the degree of citizen participation in environmental decisions in general (see Coenen, Huitema, & Hofman, 1998). One assumption underlying this scale is that, in a decision process, there will be a proponent of a certain plan, a public authority overseeing the acceptability of this plan in policy terms, and local citizens. Also, a realistic assumption was made that citizen participation is directed towards the public authority. Furthermore, in line with the institutional approach (see Chapter 1), it is built upon the rule typology developed by Elinor Ostrom, and is reflected in Table 7.2. The reader will observe that I have grouped 'position', 'scope' and 'authority' rules (separate in Ostrom's framework) together, because I consider them to be strongly overlapping.

Some remarks are in order about my purposes of developing this table. Firstly, my intention was not to design an exhaustive table, but merely to give an indication of some of the things that I will look for in the case studies that follow. Secondly, I do not intend to delve into the synergy between the various types of rules which clearly must exist (having decision rights but no relevant information, for instance, makes the rights rather useless).

7.1.5 Practical Approach: Two Cases

In order to assess the quality of the outcomes of a participatory approach to hazardous waste siting, I will examine a case from Canada, which has been heralded as an

[1] It is easy to see that constitutional differences (e.g. Canada being a federation, and the other countries being unitary states) affects the exact operation and implications of this general starting point, but this topic is ignored in the rest of this chapter.

Table 7.2 A scale of participation

Rule type	← Non participatory	- - - - - - - - - - - - - - - -	Highly participatory →
Position, authority and scope	– Citizens cannot decide on details of a proposal and cannot decide the policies used to judge it	– Citizens can decide on details of a proposal but not on the policies used for judging it	– Citizens can decide on details and can decide on policies used for judging concrete proposals
Information	– Citizens receive no information on the proposal and receive no support in processing it	– Citizens receive information from the authorities and/or private sector but are not supported in processing it or vice versa	– Citizens receive information on the proposal and are supported in processing it
	– There is no exchange of arguments on the proposal between other parties and citizens	– Citizens may listen to the arguments from others, but not 'talk back'	– Citizens can listen to arguments from others and may respond
Boundary	– Citizens have no access to the decision-making process	– Affected citizens have access to the decision-making process	– All citizens have access to the decision-making process
Aggregation	– The decision is to be based on expert-consensus	– The decision must be based on deals between market parties, and/or their representatives, who make judgements on the various interests involved	– The decision is to be based on consensus resulting from dialogue among all relevant citizens–
	– The decision must be in the general interest	– The decision must be in the interest of the parties involved	– The decision must be in the local interest
Pay off	– Citizens pay high fees to be allowed to participate and bear their own costs	– Citizens do not pay high fees but must bear their own costs	– Citizens do not pay high fees and receive support to be actively involved

example of a participatory approach to hazardous waste siting (Fisher, 1993; Rabe, 1994). The discussion of this one case must necessarily be done with a relatively modest purpose in mind. I do not claim that this one example is representative of participatory decision-making in general, but I do think that a single example can allude to some of the weaknesses and strengths of the phenomenon in an explorative fashion. To strengthen the image resulting from this exercise, I will provide some contrast using a case where the decision process was less participatory. The UK is a country where hazardous waste decisions are seen as being less participatory (see for example Allen, 1992; Wynne, 1987) and I have thus added a second case from the UK. Again, the modest purpose of the case study is to demonstrate potential weaknesses and strengths of non-participatory decision-making. This case is discussed first.

7.2 Decision-Making in Newport, Wales (UK)

7.2.1 The Start of the Affair: Failed Communications

The first case I describe involves a proposal for a treatment plant in Newport, South Wales (UK), towards the end of the 1980s. BF Environmental Services (BFES) saw a potential market for a new waste treatment facility in South Wales. Contacts with public officials in various counties, and the study of local land use plans, resulted in the selection of a site on an existing industrial estate, the Stephenson Industrial Estate. The local land use plan designated the site for industrial use, and the owner was willing to sell the land to BFES. BFES consequently commenced consulting public officials from the responsible planning authority, Newport Borough Council. Newport's planners indicated that they would need expert advice on the proposals but immediately raised some issues, including the proximity of the site to urban parts of Newport. However, even before being assured of support from the local council, the company bought the site.

The company then started to implement a communication strategy, which revolved around informing so-called 'opinion formers'. The first activity was to brief public officials and the local council. The idea was that they could then play a role in defending the ideas to the public. However, the strategy failed miserably, as the councilors were utterly negative towards the plans. The projected second activity in the information campaign, informing the public, followed only after local councilors had already broken the story to the press. BFES had wanted to use the experience and knowledge of its parent company (BFI) to set itself apart from other companies, but soon found this connection to be a liability as the local paper started writing about the bad record of BFI in the USA.

The accusations in the local newspaper led to negative comments from a local Member of Parliament (MP) and various councilors, who consequently organised the opposition. They established an interim opposition committee and organised a meeting to start an opposition group, to be called Newport Against Hazardous Waste Plant. Because UK planning legislation demands a neutral attitude by councilors, they could not lead the action group as they had wanted. Several ordinary citizens replaced the elected officials. The action group became the major opponent to BFES, with the covert support of important local politicians. The group started a campaign against BFES's proposals, which centered on the risks associated with the treatment and transportation of wastes, the inadequacy of UK regulations, and the possibility of waste imports. The group organised numerous meetings, protest marches, and a petition, which was eventually signed by 35,000 people (according to the action group).

7.2.2 Official Procedures Begin, and Decisions Are Made

Meanwhile, BFES prepared the legally-required environmental (impact) statement (ES). This document was completed by June 1990 and then submitted to

Newport Borough Council. The ES was submitted with two planning applications for the facility, and portrayed the site selection process that the company had followed as a rigorous and systemic effort, and suggested that the chosen site was really the best site in objective terms. However, the ES offered little opportunity to check which other sites had been considered, how they scored on selection criteria, and how the various criteria had been weighted. The reactions that followed when the applications were publicised revealed a divide between experts and non-experts. The expert bodies, including Her Majesty's Inspectorate of Pollution (HMIP), all commented that the plans were acceptable. Most other consultees rejected the site. Since Newport lacked relevant expertise in the area of waste treatment, the council opted to appoint Loughborough University as their consultants to assess the validity of the ES. Their report concluded that the site was well chosen, and that no significant negative environmental impacts of the plant were to be expected provided certain conditions were met. This conclusion was discussed with BFES, and the company promised to accept the conditions. The Newport bureaucracy now agreed to the plant.

The application was brought before the planning committee of the Council on 22 November 1990. Newport's bureaucracy sensed that the political mood was very much against the proposal, despite the positive advice from the planning department. In response, the Chief Executive wrote a note to the Council. He reminded the members that "*The pr oper consider ation of a planning application needs the objective appr aisal of all the r elevant planning issues. However difficult it might be in some cir cumstances, a local planning authority should not let emotion, or irr elevant or non-planning issues, divert its pr oper consideration of a planning application* ".[2] Newport's bureaucracy feared that a refusal would create a liability for the Borough. Pay-off rules in UK planning legislation prescribe that an 'award of costs' against an authority is possible if applications are refused for improper reasons, and the local government feared this possibility was real.

At the meeting, various councilors were dissatisfied with the information available. They seem to have expected the bureaucracy to feed them with arguments for refusing planning permission, but this did not happen. In an attempt to resolve the situation, the Council decided to move 'outside' the realm of planning law. The chair of the meeting suggested that "*the Planning Committee f inds itself in great difficulty here today because so many of the consider ations which they have mentioned here this morning, are not planning factors. And the worry that I would have is that we would arrive at a conclusion her e today whic h could in a sense pre-empt what I belie ve the mor e important debate that should tak e place . (...) I mean a debate which is and should r ove outside the question of planning criteria*."[3] The Planning Committee believed that only the full Council would be allowed to move outside the planning system and decide on the basis of the real concerns. This happened, and the full Council in the end unanimously refused permission.

[2] 'Note of General Advice by the Chief Executive', Newport Borough archives.

[3] Ibid., p. 84.

One of the official reasons for refusal was 'the perception of the local community that the proposed development was against the public interest in general and their own interest in particular'. One councilor later said "*Our officers helped us. They told us that we had no planning reasons to refuse. That is why we went outside the planning system*."[4]

7.2.3 Appeal and Inquiry

The refusal was appealed to central government. Subsequently, a 'planning inquiry' was held under the supervision of a Planning Inspector. However, the Secretary of State (SoS) for Wales 'called in' the matter and indicated that he would determine the matter himself; the Planning Inspector would supervise the inquiry and write a report to the SoS, but not decide the outcome of the appeal. The opposition group, Newport Against Hazardous Waste Plant, was accepted as one of the 'main parties' to the inquiry and was therefore allowed to attend the pre-inquiry meetings where the agenda of the inquiry was determined (within the boundaries set by the SoS: authority and scope rules). The inquiry started in early October 1991. It is common that such inquiries, despite the presence of many ordinary citizens and action groups, become battles between experts and top-flight legal counsels. This was true in this case.

The Borough advanced two lines of reasoning. The first was that the planning system itself was not the proper framework for deciding such issues. Thus, the inquiry touched upon the authority, scope, and aggregation rules that are normally accepted in the UK, but had now became contested. UK planning legislation has a widely acknowledged bias in favour of development, but Newport Council suggested that BFES's plant should not go ahead unless proven safe: '*They need to prove to me that it is safe*.'[5] This second line of reasoning was in the realm of risks. An expert retained by the Borough argued that an incorrect mixing of waste streams could occur, which could then result in emissions of untreated gasses. The action group supported the Council, but also used philosophical reasons. Even if the risks were minimal, said the group, "*it is not its (BFES, DH) place to judge how much risk local people should be prepared to take. This risk can only be decided by local people, and they are in no position to judge unless they have the full facts before them*."[6]

BFES's answers mirrored the approach the company had taken in its Environmental Statement. The company's experts noted that the types of waste to be treated at the plant were not flammable or explosive and that the building would be fully enclosed. Given this, the "*toxic concern is too weak to cause concern of f sit*",

[4] Interview with K. Critchley.

[5] Ibid.

[6] Newport Against Hazardous Waste Plant, submission to the inquiry.

according to one expert.[7] BFES's experts had performed an analysis of road accidents, specifically those involving hazardous goods vehicles. Their conclusion was that the plant would result in 'a small increase' in risk. They said that this increase should be compared to the reduction of risk elsewhere, as wastes from Newport would no longer be exported.

Most of the inquiry time was spent on the issue of safety. The Inspector forced the parties to work together on a quantitative risk assessment. Under the supervision of the Inspector, both sides came to agree that the worst case scenario (feared by the Council) was not only very unlikely but that, if it did occur, the risk of serious harm was rather limited. The effects that the worse case scenario might have on people in the surrounding area were also discussed. It was determined that only if the most stringent (and inapplicable) safety standards were applied, could there potentially arise a problematic situation with exposure of the public to specific substances from the facility.

7.2.4 Inspector's Report and the SoS's Decision

The inspector submitted a report to the SoS fairly quickly, and he fully rejected Newport council's case. Important aspects of the Inspector's line of reasoning were based on government policy. Government policy, for instance, played a major role in assessing the question of risk and its acceptability. The inspector suggested that standards for risk, by definition, are written to assess the acceptability of involuntary risks. In addition, he stated that "*Clearly, there can be no absolute safeguard*".[8] He thereby rejected the ethical argument of the action group and the demands for absolute safety. The inspector noted that the opposition to the plant was based on a perceived danger. However, since the perception of risk was not well founded, it should not lead to the conclusion that permission should be refused. The inspector also concluded that costs should be awarded against the Borough. The reason being that the Borough had failed to request a risk assessment and then refused planning permission on the basis of the absence of such an assessment. The Secretary of State followed the advice of the inspector but took about 1 year to make a decision, possibly related to the fact that elections were due. When the decision on the appeal was announced in February 1993, members of the Council responded negatively: '*it is outrageous that the Secretary of State should conclude that the Council acted unreasonably. Is it reasonable to ignore the opinions and justifiable concerns of the people the Council is appointed to represent? What is the point of the public consultation on Planning matters if the response, however strongly opposed, is to be discarded?*'[9] The remarks point towards binding consultation, which is not at all common in the UK.

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[7] BFES Inquiry, Proof of evidence A 9, by Michael Vince.

[8] Inspector's report, p. 38.

[9] Borough of Newport, Press Release 'Chemical waste treatment plant', undated.

7.2.5 Was the Decision Process Over?

Despite its clear defeat, Newport Borough Council did not give up. The Borough had another weapon against BFES, which was its authority as a 'waste regulation authority' (WRA). Although Newport's waste regulation officers had already indicated they held no objections to the proposal, the Council decided to try and refuse the required waste disposal licence regardless. BFES applied for a waste disposal licence on 18 October 1993 and, under statutory rules, the application should have been decided within 4 months. However, by February 1994, there were still no indications that a decision was imminent and BFES appealed to the Secretary of State for 'deemed refusal'. The consequence was yet another inquiry, which was started in September 1994. Just prior to this inquiry, Newport issued a draft version of the waste disposal licence. The draft licence became the focus of the inquiry, together with the draft operating plan for the facility. The inquiry was relatively brief, and not open to the general public because sensitive business information was being discussed. The inspector recommended granting the licence under certain conditions, including a completed hazard and operability (HAZOP) study. The Secretary of State had clearly learned from the first inquiry; by November 1994, he informed the Council that he was 'minded' to grant the licence and overrule Newport's decisions. In doing so, he put pressure on Newport to grant the licence itself so as to keep a certain amount of control. However, there was great pressure on BFES as well because the company had already started to construct the facility. The final decision resulted from a site visit by local councilors to discuss matters. During this visit, the councilors and the company reached an agreement that a waste disposal licence would now be issued. Further, BFES would no longer pursue the award of costs.[10] By February 1996, the company had its waste disposal licence and wastes were being transported to the site for the first time.

7.2.6 Current Operations

When I visited the plant in 1999 it was operating, albeit below design capacity. The waste market had changed radically and it appeared that the plant was starting to become profitable after a few marginal years. BFI had withdrawn from the UK market, and the management of the plant had bought it in 1998, only 18 months after the plant had opened. Both the Council and its neighbours did not yet fully accept the plant, which was evident by the fact that the company was the usual suspect for various complaints about foul smells, even though these could also be caused by other installations in the area. Traffic of hazardous goods to and from the plant often does not follow the designated route, as the citizens had feared.

[10] Interviews with Mr. T. Butterfield and Mr. B Sulek.

7.2.7 The Extent of Citizen Participation

Clearly, there was a great deal of desire to participate in the decision process on the part of citizens. The total of 35,000 signatures easily makes the BFES proposal the most contentious issue in recent Newport history. However, 35,000 signatures is nowhere near half of the population; and the reactions came mainly from people living near the proposed site. That being said, one can briefly summarise the rules regarding citizen participation as shown in Table 7.3.

I have had some difficulty in scoring the various rules for the Newport case. These problems are, in part, related to the fact that the decision process had various stages. These stages include site selection (= market decision), planning permission (= decision by local officials and the council), planning inquiry (= advice by expert, decision by SoS), waste licence (= decision by local officials and council), plus another inquiry (= advice by expert and decision by SoS). Different rules applied to each stage, and there were very sharp restrictions on what could be decided at each stage. I have tried to assess the combined effect of these events. My view is that some of the rules structuring the decision process are participatory in nature. This is specifically true for the consultation and inquiry stage of the process: any citizen has access (boundary rule), and citizens can listen to information and talk back (information rule). On the other hand, authority rules locate decision power in the hands of the private companies (especially site selection and choice of technology), whereas the local authority must decide on the acceptability of the proposal. The latter authority is very strongly checked by central government and thus does not have space to decide on the basis of local considerations. The aggregation rules make clear that the decision is in part up to the private sector, and the rest of the decision is up to elected representatives, advised by experts. Citizens only indirectly affect this constellation through elections. In this case, no local representative (except the SoS) approved of the plans. However, the decision was

Table 7.3 Rules in the Newport case

Rule type	Value in this case	Participatory or not?
Position, authority and scope	– Citizens can not decide on details of the decision and cannot decide on the policy behind it	– Not participatory
Information	– Citizens receive information from the authorities and/or private sector but are not supported in processing it or vice versa	– Intermediate
	– Citizens can listen to arguments from others and may talk back	– Participatory
Boundary	– All citizens have access to the decision-making process	– Participatory
Aggregation	– The decision must be based on deals between representatives who make judgements of the various interests involved. Their decisions are strongly influenced by expert consensus	– Intermediate/not participatory
	– The decision must be in the general interest	– Not participatory
Pay off	– Citizens do not pay high fees (unless they go to court) but must bear their own costs	– Intermediate/not participatory

effectively removed from the local level by the appeal process where, expertise (of the Inspector) is used to advise on the matter.

An inquiry is an impressively participatory and intense decision-making tool, where citizens' arguments receive close attention. The Inspector's advice is also quite influential in terms of the SoS's decision. At the national level, the intensity of local opposition is naturally somewhat more remote. The effect of the lack of help in collecting and processing information on the citizens is that they are significantly handicapped during the entire process, unless they happen to have experts in their midst. In this case, it is my impression that citizens were largely dependent on their personal experiences (for example in terms of the risk of accidents) and on a more philosophical case against the proposals. This case was eloquently put forward, but had little influence on the decision. It would seem that especially the very localised form of information (citizens had collected newspaper clippings about road accidents) that was used, contributed to this failure. Overall, the dominant decision-makers in this case study were not the citizens of Newport, but private market parties and elected politicians at the national level, and their expert advisers.

7.2.8 An Assessment of Decision Quality

What is the effect of the moderately participatory nature of the process? One problem in assessing the quality of the decision in this case is that multiple actors took various decisions. I will focus specifically on the decision to allow the facility (Newport and SoS) and to build it (BFES).

Based on an overall view resulting from Table 7.4, I consider that the decision made was of relatively good quality, except from a community perspective. It would seem that this is a direct result of the way the decision process has been structured.

Table 7.4 Decision quality in the Newport case

Perspective	Decision(s) rational?
The market	– The landowner sold the land, i.e. the price was acceptable
	– The facility has proved to be viable and is successful commercially
Politics	– The facility was unacceptable to local representatives and is not rational from their perspective
	– The facility is acceptable from the perspective of the SoS, supported by a majority in Parliament. A decision to reject the facility would have brought short-term political gains, but would also have resulted in a lack of treatment capacity and therefore not resolved the hazardous waste issue
Courts	– Correct procedures have been followed that were knowable in advance and the decision is not obviously capricious
Experts	– All experts agreed that the facility was environmentally safe and that adequate safety measures had been incorporated in its design
Community	– The facility is not acceptable to the people living in the neighbourhood nearby and is not regarded as being in their best interest
	– Within Newport, only a minority was motivated enough to participate. The 'silent majority' agrees to the facility?

Citizen participation is essentially limited to consultation, even though their local council supported them. The desired and achieved effect of an appeal to the SoS is that a decision is looked at from the national perspective. There, the dominant way of looking at proposals is largely confined to technical issues. If the proposal is against the interests of the community this is relevant, but only if there is a 'substantial' basis for such contentions.

7.3 Participatory Siting: Swan Hills, Alberta, Canada

7.3.1 Introduction: Emergence of a Problem

In the early 1970s, the government of Alberta had become aware of a potential hazardous waste problem through certain studies of waste management. The studies did not lead to much response. The first company to actually pick up the challenge of providing treatment facilities (Kinetics Contaminants) came forward towards the end of the 1970s. With the help of local councilors, who were interested in economic development, the company had selected a site at Fort Saskatchewan. At a meeting to inform the local public, about 300 people were present. The gathering was a public relations nightmare as furious citizens created an intensely hostile environment for the speakers. After the meeting, some citizens started an extremely well organised and effective campaign against the plans. The government found itself caught between a rapidly developing anti-facility lobby from certain local communities (Kinetics had also tried elsewhere) and its commitment to responsible waste treatment, which it saw as a cornerstone of its strategy for industrial development.

The provincial government decided to have a cooling down period during which the issue of hazardous would be studied, and established a Hazardous Waste Management Team for this purpose. One of the Team's activities was to commission a report on hazardous waste siting experience elsewhere. This report (Krawetz, 1979) argued that, for successful siting, social concerns should be placed at the forefront. For communities to accept a facility, aggregation rules should stress that there is a clear local benefit associated with the facility. In addition, the report advised that the proponents of a facility should be a trusted organisation and that no waste should be imported. Finally, hearings should not be held as opponents often overtook these. The Hazardous Waste Management Team supported the recommendation that a more participatory approach was required. The Team also suggested that, given the projected waste increase, waste treatment capacity was urgently needed.

7.3.2 Hearings and Further Study

The next step in the process was the presentation of the report to the public during hearings of the Environment Council of Alberta (ECA), a government-funded expert body. The hearings would form the basis of ECA advice on hazardous waste

policies for the province, including an approach towards siting. By 1981, the ECA had concluded that the province needed two facilities for hazardous waste treatment within a 100 km radius of the major cities of Edmonton and Calgary. The ECA backed the idea that public acceptance should be 'the number one criterion' in site selection, but at the same time suggested that a Site Selection Committee should be established, which '*should consist mainly of tec hnical experts, since a sound technical decision will facilitate public acceptability*' (ECA, 1980: 152). The ECA indicated that through discussions, the public would come to understand the nature of, and need for a facility. Combined with an 'open' process, which could include negotiations over compensation, public acceptance would result. However, if this were not to be the case, then the province should override the resistance (ibid.: 152–153). Whither participation?

7.3.3 Implementation of a New Approach, but Which One?

By January 1981, the provincial Cabinet had formed a Hazardous Waste Implementation Team for the process proposed by the ECA. The Team was asked to devote time to the development of more definite site selection criteria and to the preselection of four municipalities. In order to achieve community acceptance, a high-ranking official suggested that they should start negotiating a compensation package. Before the Team could get to that stage, however, the Implementation Team was disbanded and effectively replaced by the Siting Task Force (STF), a group of officials formally appointed to assist the Implementation Team, but desiring a more participatory siting approach. Within the Task Force, the selection of four particular communities was rejected. The facilities were not to be constructed close to the waste generators per se, but in communities that would accept them and that were outside certain broad exclusion areas. Only after a certain level of community interest had been expressed, would detailed technical issues be studied. The term used for this approach was 'invitational siting'. The Implementation Team had resisted the Task Force's ideas. The Task Force, with membership of high-ranking public officials, however, had the ear of the Minister of the Environment. Many observers looked at the choice of the Minister in disbelief as the proposed approach defied the normal understanding of siting. One member of the STF said: '*The attitude among the powers that be was, give them the money, let them try and they will fail*' (Sherbaniuk, 1992: 118). It appears that the price that had to be paid was an assurance to the minister that the approach would be successful: a site was promised by March 1982. The core of the new siting approach was the addition of a local veto to the normal decision procedures. How and by whom such a local veto should be exercised was not clear, but the intention was that, in the event of local opposition, the facility would be sited elsewhere. The government of Alberta would retain the final say on the facility, but after local approval. Each of ten phases in the process would have to end with an affirmative response from a community, that it wanted to continue, or otherwise the process would be over (see Krawetz,

MacDonald Research Management Consultants, & M. Payne and Associates, 1983: 52–53).

The Task Force started the implementation of the process with a large number (67) of community workshops, assisted by the Rural Education and Development Association (REDA). The result was 46 requests for free 'regional assessments', studies of the suitability of certain regions, and following this numerous local workshops to discuss the outcomes and to select 'community representatives' to a provincial workshop by October 1981. Fifty-five delegates attended the workshop. REDA asked them to start local discussion groups, and imagined that a dialogue, in and between the various communities, would lead to an outcome. However, the Task Force started to target specific municipalities before the local discussion groups had reached a conclusion (Krawetz et al., 1983: 62). The STF had gained approval from several local councils and had moved into the ones that promised good results. They would not use REDA's services further.

However, the local councils had underestimated feelings in the community. Opposition mounted and accusations that the councils were trading their citizens' health for dollars were made. In one county, the Task Force was portrayed as an unreliable organisation that used '*nothing but sneaky tactic*' (Krawetz et al., 1983: 67). The situation there escalated when a group of 200–300 people invaded the county office during a meeting of the Council. The group demanded that a referendum be held on a by-law that had been prepared to allow the facility. Such a referendum took place and the outcome killed the process in that county. The siting programme was in shambles.

The Task Force came under tremendous pressure. Burke Nagle, an agricultural sociologist approaching retirement, was hired to study and revamp the process. His analysis – briefly summarised – was that the STF should better anticipate the tactics of its opponents. Since opponents were rightfully pointing out the dismal record on waste management to date, Nagle suggested that mistakes from the past should be admitted, and the facility presented as a solution. Films about the mismanagement of wastes, previously shown by the opposition, should be shown by the Task Force in order to convince the public that a better facility was needed. Nagle also suggested that the Task Force itself should offer to hold a binding referendum, before the public asked it. The Minister had by then '*become desperate enough*' and accepted the changes, including the idea of a binding referendum.[11]

In reality, the siting process consisted of an information programme of three seminars. After a film, an introduction and presentations about various technical topics by communicatively-able experts would follow. Attendance of the seminars was limited to 50 and there was an emphasis on 'impression management', including the leading away of opponents during hearings. Also, there was increased attention placed on establishing trust and rapport. This was especially achieved by engaging the energies of local leaders. Based on informal street interviews, a list of about ten people that were trusted in the community was developed ('power

[11] Interview with N. Krawetz.

structure analysis'). Attempts would be made to convince them of the need for the facility and the safety of its operations, and then they were asked to sit on a local citizens' committee (Community Liaison Group) that was to discuss the proposals. The idea was that they would become active local proponents of the facility. The approach was tried in three towns that had previously expressed interest but had been ignored (possibly because of their remote location). These communities were the Special Areas, Ryley, and Swan Hills. In each of these communities, the desire to create new employment played an important role in their local council's willingness to participate. The general public in these localities was not informed of the power structure analysis or of the fact that some of their neighbours had been 'turned around' by the Siting Task Force (Sherbaniuk, 1992: 97–98). The STF was not very open about another issue either. It appears that the Swan Hills public assumed compensation from the province. One citizen told me: '*There was a statement that we would ne ver be short of mone y. Council e xpected that the streets would be paved by gold*'.[12] Members of the Task Force have denied making any such promises. This may be true, but the Task Force was aware that there was an impression that economic benefits would accrue, and failed to counteract these (Armour, 1990: 194). Therefore, the case can be made that the siting process had manipulative aspects. Indeed, one of the community leaders recalled: '*The way this process works is manipulative as hell. It was a real lesson in blatant manipulation, but it was honestly stage-managed. There was no effort at deceit, but we did everything we could to convince people and bring them onside'* (Sherbaniuk: 92–93).

7.3.4 Community Responses and Cabinet Decision

I cannot present the effects of the new siting approach in all the three communities involved in detail. However, I would mention that the approach failed in the Special Areas, where the opposition effectively used the ECA siting criteria to demonstrate that there were no suitable sites. Ryley was a special case in the sense that it was part of a county where the task force had already been defeated by referendum. The village now acted on its own, and the new approach to participation worked. The referendum resulted in a majority of 77% in favour of the plant, with a turnout of 95%. This remarkable outcome drew great acclaim and gave the STF credibility, even though the population of the surrounding county intensely disliked Ryley's decision. The Task Force had achieved one of its purposes, that is to make the facility something to be desired. After Ryley's decision, the only other town still in the procedure was Swan Hills. The council and CLG felt they should also quickly try and take a positive step towards the facility. They organised a referendum. An amazing 79% of the voters (69% turnout) was in favour of a plant. The Task Force stopped its work and presented the provincial Cabinet with two potential

[12] Interview with J. Butler, Swan Hills, 21 June 1999.

sites. After intense deliberations, the Cabinet chose Swan Hills, leading to intense celebration there and a furious reaction in Ryley.

Trust in the Task Force was of crucial importance in the Swan Hills decision to host the facility. The Task Force was effectively able to communicate the message that everybody generates hazardous wastes and has a store of hazardous chemicals in the house. Such information, coming from reliable and communicatively-able Task Force members, introduced by people from within the community, was able to convince most of the citizens. The success of this approach was apparent when Greenpeace came into the town and, in a rather alarmist fashion, claimed that a facility would bring major health effects. In the village, Greenpeace were seen as scaremongerers. Rather, the people of Swan Hills placed their trust in the Task Force's view of the potential risks. This view was that '*adverse affects on health have been highly overstated*' (Collections Editor, 1987: 3).

Did the people of Swan Hills know to what they were consenting? Of course they knew that the facility would involve hazardous wastes and likely incineration. However, how the facility would look, who would operate it, and what would be the benefits for the community was really uncertain. This was because the provincial cabinet had not moved forward with its hazardous waste policy and was yet to accept any of the outcomes of the decision process. The Task Force had learned that the public wanted a 'Cadillac facility', and that is what they promised the public. A 'Cadillac facility' was a comprehensive system for collecting and treating wastes using the latest technologies, including first-class, high temperature incineration. It appears that the Task Force has gone quite far in suggesting a high level of safety at the plant. '*We had people in the community talking about pr ocesses and technologies who were not qualified to talk about them. I was ther e when the plant was being b uilt and pr omises were made about no runof f, zero effluent and such – it's not possible to have zero effluent*' (Sherbaniuk, 1992: 225). In addition, the STF operated on the basis of waste projections and a facility design envisioned by the ECA, and seems to have closed its mind to other voices, for instance from the Waste Regulation Branch of Alberta Environment. Officials within that branch told me that '*Technical input was ne glected at any phase of the pr oject*'; and '*It is not a system that r eflects the needs*'.[13] Such issues were not discussed with the citizens of Swan Hills. In fact, groups that could bring forward arguments about real needs (the officials, and also environmental groups) were not included in the decision process.

7.3.5 Developments After Facility Construction

After the site selection process was completed, hazardous waste regulations were phased in and hazardous wastes started being stored at the facility that was under construction. The required capacity soon turned out to be less than predicted. The

[13] Interview with A. Fernandes.

supply of wastes was in fact so low that a decision was made to operate with a new and untried incineration technology that could destroy hazardous wastes but without requiring a large feedstock: 'rocking kiln incinerators'. Waste streams continued to differ from those predicted, however, and the two kilns were replaced in the early 1990s by a rotary kiln, which has also never operated in a commercially successful fashion. By that time, the plant had started to become politically controversial. Nearby communities had become sensitive to the risks associated with waste transport. Native Canadians (First Nations), about 20 km from the incinerator, thought their hunting grounds were being polluted (the facility had leaked PCBs, and these are found at elevated levels in plants and wildlife around the facility). In addition, the facility was operated by a private firm that had obtained a 'sweetheart deal' from the province according to some. While this company made a provincially-guaranteed profit, the province had to fork hundreds of millions Canadian dollars in subsidies (Nikiforuk, 1996; Sherbaniuk, 1998).

7.3.6 The Rules That Applied in This Case

The siting process in Swan Hills was not written down in law, but slowly emerged from the work of various advisory committees and oscillated between participatory and non-participatory forms. Apparently, political rationality demanded that provincial and local politicians stayed away from the siting process. Public officials and expert bodies therefore played the metagame of devising a siting procedure. A participatory approach was finally accepted, in part because it promised results. Table 7.5 presents the rules used in the final three communities.

When compared with the Newport siting process, Table 7.5 shows that many scores are more towards the participatory end of the spectrum. The only exception is the boundary rules, which effectively excluded people from outside the local

Table 7.5 Rules in the Swan Hills case

Rule type	Value in this case	Participatory or not?
Position, authority and scope	– Citizens can decide on details but not on policy	– Intermediate
Information	– Citizens receive information on the proposal and are supported in processing it	– Participatory
	– Citizens can listen to arguments from others and may talk back	– Participatory
Boundary	– Affected ordinary citizens have access to the decision-making process	– Intermediate
Aggregation	– he decision is to be based on consensus resulting from dialogue among all relevant citizens	– Participatory
	– The decision must be in the local interest	– Participatory
Pay off	– Citizens do not pay high fees but must bear their own costs	– Intermediate

community, at least during the referendum stage. I have struggled with the first category of rules because, as in the UK, the process was designed around various stages. One really new thing about the Alberta process is the fact that communities (through a referendum) had veto power. In this sense, they had decision power, albeit not about policy issues, but about more concrete issues (acceptation of the plant or not). However, this veto power is couched in with the work of both experts (certain areas are excluded for technical reasons) and elected politicians (they have to approve the final site). The reasons why I would hesitate to embrace the process that was followed in Alberta from the citizen participation perspective are that (1) citizens were assisted in their efforts to process information, but only in a fashion that pleased the Task Force. (2) Citizens themselves refused outside expertise. The pay-off rules should perhaps have been formed so that they could have acquired independent expertise.

7.3.7 The Quality of the Decision

As with the Newport case, I find that the character of the process is reflected in the quality of the decision.

The weakest score of all 'quality indicators' in Table 7.6 relates to the economic and legal aspects of decision quality. The importance of social acceptability has resulted in a relatively remote site, which does not enhance its profitability. Also, safety measures at the facility have been very stringent at the request of the citizens (i.e. special transportation trucks have been acquired) and this may have driven up

Table 7.6 Decision quality in the Swan Hills case

Perspective	Decision(s) rational?
The market	– The facility has not operated profitably and has an uncertain future
	– Waste generators avoid the facility because of high treatment prices and long transportation distances
Politics	– The facility was acceptable to local representatives and is rational from their perspective
	– The facility is acceptable from the perspective of the provincial Cabinet. The process sheltered them from fierce opposition
Courts	– After the 'invitational siting process' normal licensing and planning procedures were followed. However, the invitational approach was unpredictable for the communities involved
Experts	– All experts agreed that the facility was environmentally safe and that more than adequate safety measures had been incorporated in its design. Some thought the facility was oversized and that impossible promises about safety had been made
Community	– The facility, until today, is acceptable to the people living in the community of Swan Hills and is regarded as being in their best interest
	– Practically the entire population of Swan Hills participated in the information sessions. Voter turn out at the referendum was close to 100%

costs. However, most criticism in this aspect is aimed at the fact that the facility was not based on the real needs of the province, and at the contract to operate the plant. Both factors have further driven up costs considerably. They are, however, not intrinsically related to citizen participation.

7.4 Victims and Volunteers: Analysis and Conclusions

7.4.1 Differing Assumptions

The decision processes in Newport and Swan Hills have clearly been based on different assumptions, and the decision processes were structured by different sets of rules. It is important to note that the rules that applied in the Swan Hills case were additional to the official rules on pollution control and land use-legislation. The 'normal' rules for decision-making in Canada are very different from the ones that were applied here, and are in fact not that different from their UK counterparts. Despite the fact that there was strong local opposition to the proposals from private firms in both cases, the 'normal' UK decision rules continued to apply there, whereas the Canadian rules were temporarily set aside. The reason for this distinction is related to political rationality. The Canadian public was strongly opposed, knew well how to find their elected representatives, and even intimidated representatives with violence at certain times. The provincial Minister for the Environment was subject to an intense campaign from certain communities, resulting in one phone call to his office every 10 min over several weeks. In addition, the private sector had a relatively weak incentive to site a facility in Alberta because it was uncertain that it would be profitable. The one private company that did try to site a facility gave in to local resistance. In this situation, political rationality demanded a less confrontational approach, which at the same time could solve the provincial hazardous waste problem.

The public in the Newport situation had no tendency towards violence. In addition, there was a private firm that showed its determination to gain approval. The firm was willing to use the appeal process from the outset. Local, elected, representatives all spoke out against the proposal, in part because of electoral considerations, but this factor carried relatively little weight at the national level, where the SoS acted primarily as an agent of the planning system. In doing so, he could find shelter under a very effective enforcement mechanism: the inquiry. Chaired by a seemingly independent and impartial Planning Inspector, lasting for days, and offering an extensive opportunity for relatively 'hostile' cross-examination and technical discussions, the inquiry satisfies a deeply felt need for adversarial interaction and judgement by a third party. In the process, the Planning Inspector took care to enforce the normal decision-making rules by only considering formally relevant information and by making clear (in awarding costs) that a move outside the planning system was unacceptable. The Inspector's judgement was accepted

by most parties, to such an extent that deviations from the report by the SoS were the most controversial parts of his decision. In this situation, adherence to the 'ordinary' rules is politically rational, despite any resistance.

The differing demands of political rationality implied differently structured decision processes. In the Newport case, the private waste firm could determine the site, and public authorities essentially considered the issue of risk. In terms of quality, the question as to whether the local community would benefit from the decision would not be an issue unless someone could substantiate the claim that the development was a threat to their health. In the Swan Hills case, experts had ruled out certain parts of the province as unsuitable for waste treatment beforehand (constraint maps). Apart from this, it was mainly up to the local communities to decide whether they wanted the facility or not, so their interests were also an important factor. The rules in use here during the invitational siting process were clearly more participatory than the rules applied in the Newport case. As indicated earlier, a straightforward comparison of the two cases is difficult, if not impossible. I would argue, however, that the described experiences may give useful food for thought to people operating in various settings. This is because certain potential consequences of participatory and non-participatory decision-making are described which can be expected to also occur in other settings, or which could perhaps be avoided.

7.4.2 Different Qualities

Have different assumptions affected the outcomes in the two cases? The answer would seem to be a yes. Whereas the facility in Newport has never been fully accepted by the local community, and is seen as contrary to the local interest; the facility in Swan Hills continues to be accepted and supported. In other words, in Newport the social quality of the solution was poor, in Swan Hills it was good (although one must not close ones eyes to the fact that other communities like the facility much less). However, has a price been paid for this accomplishment, i.e. can the outcomes in Swan Hills be evaluated negatively from perspectives other than social quality? It seems that this is indeed the case. It does seem that a choice to emphasise participation in the decision process may reduce the market and legal rationality of the decision, albeit that the technical quality of a decision can be maintained. I am convinced (also on the basis of another Canadian case) that the economic quality of the Swan Hills decision could have been better, even under a participatory process. In particular, a more regular update of waste potentials would have improved the decision over the capacity of the facility and the applied technology. The failure to do this, is not intrinsically linked to the participatory nature of the decision process. Given that the 'unusual' location and the 'unnecessary' safety measures at the plant are more likely to have such an intrinsic linkage, it is probable that the economic quality of decisions should receive close attention in participatory decision-making. I am not convinced that the legal quality of decisions under participatory decision-making can be guaranteed. Certainly in situations, such as

in Alberta, where more than one community volunteers, such communities will not know in advance whether they will be selected. Or worse: if they identify a perfectly suitable site, but decide against volunteering, they run the risk of getting it forced upon them. This was an important consideration for various communities in Alberta. One solution would be to develop a more rigid structure for participatory decision procedures, but they could quickly loose their flexibility, which is part of the attraction.

Overall, I feel that one can say that the two case studies do provide support for the idea that the set-up (rules) of decision procedures does affect the outcome and that, in a sense, the choice of a certain procedure determines the type of quality that can potentially be achieved. The Swan Hills case demonstrates that participatory decision processes can have a great advantage over other approaches in the sense that they avoid conflict, even with the most sensitive proposals, and with an already sensitive population. The implication is that it could perhaps be a valuable addition to the standard routines of decision-making, where gridlock threatens, or political rationality demands it. One needs to keep in mind, however, that even in the exemplary Swan Hills case, 67 communities entered the decision process, but only 2 agreed to host a facility. An alternative suggested by the UK case study is that greater care is taken in introducing enforcement structures, especially inquiries that satisfy the need for adversarial interaction and cross examination.

References

Allen, R. (1992). *Waste not, want not*. London: Earthscan.

Armour, A. (1990). *Socially responsive facility siting*. Waterloo (Ontario), Canada: University of Waterloo.

Bradshaw, B. (2003). Questioning the credibility and capacity of community based resource management. *The Canadian Geographer/Le Géographe Canadien, 47*(2), 137–150.

Burnheim, J. (1995). Power-trading and the environment. *Environmental Politics, 4*(4), 49–65.

Coenen, F., Huitema, D., & Hofman, P. S. (1998). *Green participation?* Paper prepared for the IIAS-conference 'The Citizen and the State', Paris.

Collections Editor (1987). Interview with Dr. Walter Harris. *Collections* 3.

Dahl, R. A. (1989). *Democracy and its critics*. New Haven, CT: Yale University Press.

Davy, B. (1997). *Essential injustice*. Vienna, Austria: Springer.

Diesing, P. (1962). *Reason in society*. Urbana, University of Illionois Press, Illionois.

ECA (Environment Council of Alberta) (1980). *Hazardous waste management in Alberta.* Edmonton, Canada.

Fisher, F. (1993). Citizen participation and the democratization of policy expertise. *Policy Sciences*, 165–187.

Hisschemöller, M. (1993). *De democratie van problemen*. Amsterdam: VU Uitgeverij.

Hunold, C. (2002). Canada's low-level radioactive waste disposal program: Volunteerism reconsidered. *Environmental Politics, 11*(2), 49–72.

Inhaber, H. (1998). *Slaying the NIMBY dragon*. New Brunswick, NJ: Transaction.

Krawetz, N. (1979). *Hazardous waste mana gement*. Edmonton, Canada: Alberta Environment Research Secretariat.

Krawetz, N., MacDonald Research Management Consultants, & M. Payne and Associates (1983). *Hazardous waste management in Alberta. A chronology*. Edmonton, Canada: ECA.

Kuhn, R. G. & Ballard, K. R. (1998). Canadian innovations in siting hazardous waste management facilities. *Environmental Management, 22*(4), 533–545.
Lidskog, R. (2005). Siting conflicts – democratic perspectives and political implications. *Journal of Risk Research, 8*(3).
Nikiforuk, A. (1996). Ralph Klein's toxic folly. *Canadian Business*, 66–73.
Petts, J. (2000). Municipal waste management: Inequalities and the role of deliberation. *Risk Analysis, 20*(6), 821–832.
Petts, J. (2001). Evaluating the effectiveness of deliberative processes: Waste management case studies. *Journal of Environmental Planning & Management, 44*(2), 207–226.
Portney, K. E. (1991). *Siting hazardous waste treatment facilities. The NIMBY syndrome*. New York: Auburn House.
Pushchak, R. (1998). Failing to site hazardous waste facilities voluntarily. *Journal of Environmental Planning & Management, 1*, 25–44.
Rabe, B. G. (1994). *Beyond NIMBY*. Washington, DC: Brookings.
Sherbaniuk, R. (1992). *History pr oject. Alberta Special W aste Mana gement Corpor ation*. Edmonton, Canada: ECA.
Sherbaniuk, R. (1998). The price of protection. *Alberta Views, 3*, 26–33.
Slovic, P. (2001). The risk game. *Journal of Hazardous Materials, 1–3*, 17–24.
Watson, M. & Bulkeley, H. (2005). Just waste? Municipal waste management and the politics of environmental justice. *Local Environment, 10*(4), 411–426.
Williams, B. A. & Matheny, A. R. (1995). *Democracy, dialo gue, and en vironmental disputes*. New Haven, CT: Yale University Press.
Wynne, B. (1987). *Risk management and hazardous waste*. Berlin: Springer Verlag.

Chapter 8
Fora, Networks and Public Examinations

Building a Sustainable Development for South East England

Joe Doak

8.1 Introduction

Ever since Sherry Arnstein's simple and effective[1] typology of the levels of public participation (Arnstein, 1969), planning theorists have been trying to conceptualise the nature of public involvement. At the same time planning practitioners have been grappling with the realities of trying to engage in a meaningful and 'democratic' way with the local communities and stakeholder groups in whose name the plans and strategies are prepared and in whose interests places and spaces are supposed to be developed. Both ventures have been fraught with uncritical conceptualisation, simplistic analysis, unexpected findings, and frustrated encounters. They have also been characterised by a slow maturing of understanding and the development of realistic and sensitive approaches and conceptual frameworks. Many contemporary writers and practitioners now see public participation in planning as a constrained but potentially socially progressive vehicle for 'opening-up' decision-making processes to a wider range of interests, particular the citizens who have to use the environment which is planned and produced. They realise that this process, like the society within which planning is embedded, is complex and needs a reflective approach which builds dialogue over time.

Much of the participation literature has concentrated on local planning practice and the involvement of local community groups in these planning exercises. Some (e.g. Cawson, 1982; Healey, McNamara, Elson, & Doak, 1988; Low, 1991; Saunders, 1979) have emphasised the fragmentation of planning regimes and the (imperfect) hierarchical power relations which are one of the major constraints on the freedom of local planning. Often these studies stress the inequality in access to the higher levels of governmental decision-making and different 'modes of operation' apparent at the various levels of state policy-making and implementation.

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[1] Although Arnstein's ladder is not without its own problems, as alluded to in the introductory chapter to this book.

F.H.J.M. Coenen (ed.), *Public Participation and Better Environmental Decisions*,

This chapter aims to overview the main conceptual frameworks for understanding and, in some cases, building participatory approaches to land use planning and explore their utility in analysing the experience of a regional planning exercise in South East England. In particular it examines the contribution of recent 'new institutionalist' ideas to our understanding of participatory processes and the implications for practice of using them to build strategies of public involvement in policy-making and implementation.

The use of a regional level case study, particularly in the light of UK experience, provides its own problems. Regional planning and governance in the UK has long been placed in the background as centralised policy objectives (usually expressed in the form of Central Government Circulars or, more recently, Planning Policy Guidance Notes) have fought with the priorities set at the local (district or county) level of government. It has been local government which has been given the responsibility of producing statutory development plans (structure and local plans) whilst regional planning policy was steadily whittled away, ending up (by the early 1990s) as brief and anodyne statements included in centrally drafted Regional Policy Guidance Notes (RPGs). This was not an environment in which 'public participation' was either given much weight or, to be honest, deserved to be given it!

However, the Labour Administration which came into power in 1996 put regionalism and devolution firmly on the political agenda. Alongside the proposals for separate Assemblies for Scotland, Wales and Northern Ireland was a commitment to have (indirectly) elected Regional Assemblies for the regions of England and a related devolution and strengthening of regional planning (and related) policy. This was the more supportive political and policy environment which correlated with the review of the regional planning guidance for the South East of England (RPG9), on which the case study material is based. However, as we will see, the immaturity of the new arrangements and inevitable tensions and negotiations involved in this, as in *any*, planning process meant that the input of stakeholder groups and the general public was not straightforward.

The regional planning process under consideration in this chapter illustrates how the principles of sustainable development have been introduced into land use planning practice. It evaluates a particular attempt to embed environmental and broader sustainability criteria into the very heart of planning decision-making. It is, therefore, one particular example of a general process, and it begins to shed light on the way that those processes can be structured in certain ways, using different institutional arrangements which privilege some interests at the expense of others. This 'selectivity' also has important implications for the subsequent 'quality' of the decision-making process, in terms of the information and resources that are drawn upon to construct particular frameworks, policies and programmes.

Before we consider this regional planning process, it's worth briefly overviewing some of the key ideas and frameworks which have been used to understand and explain public participation in planning practice at all levels.

8.2 Theoretical Perspectives on Public Participation in the Planning Process

Sherry Arnstein was one of the first to examine planning practices and conclude that public participation could occur in a number of different ways and involve different levels of influence. Figure 8.1 illustrates this 'ladder' of opportunity and serves as a constant reminder of the many definitional elements which go to make-up the simple idea of 'public participation'. In the same way that there can be variation and inequality in the type of process undertaken, so can there be inequality of input from different groups in society.

The study of social inequality and the distributional implications of planning practice were given considerable attention by academics and practitioners during the 1970s and early 1980s. David Harvey's 'Social Justice and the City' (Harvey, 1973) became the pioneering work which applied radical liberal and then Marxist ideas to the nature of state policy-making and urban development. Harvey and other Marxist writers drew attention to the 'structural' constraints on state intervention and the legitimisation role of public participation. A debate developed (initially between Poulantzas and Miliband) about how much autonomy the state apparatus had from the capitalist mode of production and, within government policy-making, how much influence could be exerted by non-capitalist interests or individual factions of capital. The debate was joined by neo-Weberians who challenged the 'functionalism' of structuralist theory (Saunders, 1979, 1981). This opened-up a significant body of work which merged (to some extent) the insights

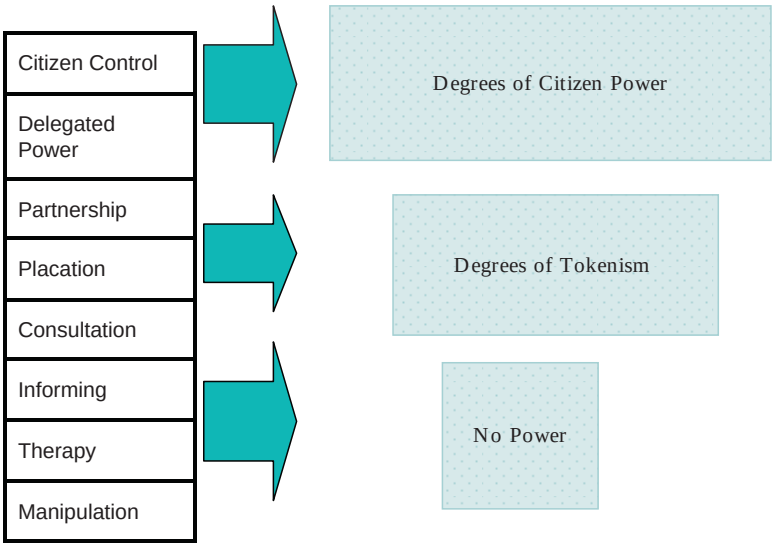

Fig. 8.1 Arnstein's ladder of participation (Arnstein, 1969)

from Marx and Weber. Writers in this vein (e.g. Harloe, Pickvance, & Urry, 1990; Healey et al., 1988) acknowledged the existence of structural (economic, political and ideological) constraints on individual actions but saw the outcomes of real life 'struggles' and encounters as contingent upon the balance of political forces at any one time.

It was but a small step from this kind of eclecticism, around the ideas of 'structure' and 'agency', to more recent approaches to public participation which emphasise 'communicative action', 'structuration' and 'discourse'. Almost inevitably the simple dichotomy between structure and agency was theorised and developed in more subtle ways. Giddens (1984) contributed the idea of 'structuration' which conceptualised structure as the product of thousands and millions of everyday actions which reproduce, enforce, challenge and change the structural constraints we live our lives within. Habermas (1987) took the linguistic turn and inserted the principle 'communicative action' into the explanatory framework. This stressed the negotiation of shared understandings through a process of discourse with the potential for 'emancipatory transformations'. It was Forester (1989) who applied Habermasian ideas to the day-to-day work of planners by emphasising the communicative role of planning. Thus planners are involved in defining, framing, arguing and negotiating issues, problems and solutions during the formulation and implementation of policies, albeit within an existing, but dynamic, set of constraints and power relationships. Forester and others (e.g. Fischer & Forester, 1993) have given us a rich body of research on the deliberations involved in public participation and interest intermediation.

Patsy Healey (Healey et al., 1995; Healey, 1996) has worked in a similar vein on the other side of the Atlantic. Drawing on a range of theoretical ideas, especially those of Habermas and Giddens, Healey outlined a 'new institutionalist' perspective which emphasises a number of key dimensions of contemporary society including:

- The important role of individual *action and interpretation* in social and political processes, albeit worked-out in relation to other individuals and often leading to *'cultural communities'* of shared meanings and understandings
- The construction of *discourses* within and between groups and organisations which build, consolidate, challenge and modified those shared meanings and understandings
- The *dynamic* nature of social, economic and political change in which knowledge, experience and images are exchanged between people and communities in a series of inter-connected *networks* and '*nodes of activity*' (e.g. households, leisure activities, firms, community organisations and government agencies)
- The exercise and negotiation of *power relations* within and between communities which can develop into structural *driving forces* which shape, and are shaped by, the relevant communities over periods of time
- The *contingent* nature of the interplay of these facets as they work themselves out in different places and social milieu with varying *institutional capacities*
- The increasingly fragmented and partial contribution of *formal go vernmental* organisations to urban management strategies; and

– The subsequent struggle of government agencies to adapt to these new conditions by restructuring themselves in terms of organisational structure and responsibility; accountability; and *policy processes* or 'ways of doing things'

The importance of 'networks' in locking different interests into the policy-making and implementation processes of the state has a moderately long pedigree in political science theory (e.g. Lindblom, 1977; Marsh & Rhodes, 1992). Its use by Healey has been extended and deepened by writers using 'Actor Network Theory' (ANT) to structure their explorations of policy-making and implementation (e.g. Callon, 1986; Murdoch, 1997; Parker & Wragg, 1999). ANT is a theory of 'translation', explaining how an innovation or set of ideas 'translates' spatially and temporarily to multiple destinations and into the day-to-day language of key 'decision-makers or shapers'. In doing this it can displace or transform existing ideas and become (for a time) the dominant 'framing' reference point.

It is this 'package' of theoretical insights provided by the post-structuralist writers of the last decade which will be given centre-stage in this chapter. From the perspective of regional planning interventions this means that consideration should be given to:

– How the participation processes and policy discourses are constructed through this level of planning activity.
– What institutional arrangements are developed to mediate and structure these processes and what impact they have on interest representation, policy-making and the quality of debate and decision-making.
– What networks are brought into being, how they operate, what ideas they develop and how they interact with existing networks; and
– What impact they then have on the political, economic and cultural relations and 'structures' which have evolved in the particular regions under scrutiny.

As Healey and her colleagues suggest:

> For those concerned with a democratic agenda – that is, forms of urban management which aid the flourishing of the diverse cultural communities which co-exist in the urban region arena while enabling the discussion and implementation of ways of identifying and acting on shared problems – a critical issue is how to identify what actions pursued in what way might make a difference….(S)uch actions are likely to focus not just on the provision of goods and services, as city governments did in the past, or the enabling of others to do so, but on the building of links both in social relations and in discourses, between the relational webs in the urban arena. (Healey, Cameron, Davoudi, Graham, & Madani-Pour, 1995: 19–20)

From the standpoint of sustainable development, regional planning provides an important relational web which has the potential to generate new policy discourses directed at the restructuring of social relations between 'cultural communities' and the actor networks they engage in and, as ANT emphasises, between these and their natural environment. An initial and tentative exploration of these ideas is carried out in relation to the south east of England. Although the theoretical ideas alluded to above were not used to construct hypotheses to guide the research into the case study, it has helped the author reflect upon the experience of being involved with the process in different ways.

8.3 Public Participation in Regional Planning: The Case of 'a Sustainable Development Strategy for South East England'

The South East of England covers the core commuting area of London. It includes the national capital; its satellite New Towns (e.g. Milton Keynes, Stevenage, Harlow, Crawley, Bracknell, etc.); and free-standing towns and cities such as Oxford, Southampton, Reading, Brighton and Colchester. It also contains the capital's Green Belt, a number of Areas of Outstanding Natural Beauty and wedges of (more or less) open countryside.

As mentioned earlier, the Labour central government has regionalised the structure of government responsibilities and intervention by establishing devolved government systems for Scotland and Wales, and creating Regional Development Agencies and encouraging representative regional assemblies in England. The arrangements for England built on the earlier Government Offices for the Regions and the growth of regional conferences, which were made-up of local authority representatives. Local government itself was reorganised in the mid-1990s (for the third time in 25 years!) and the previous two tier system of county and district councils made way for a patchwork quilt of two tier and single tier authorities, sometimes sitting side by side inside the same county boundary!

These reorganisations and regional initiatives started to have an impact on the arenas of planning and transportation policy-making during the 1990s. During that period, central government prepared its own planning guidance (Planning Policy Guidance Notes; PPGs) took advice from regional conferences on regional planning policy and prepared Regional Planning Guidance Notes (RPGs). These PPgs and RPGs filtered down to guide County Councils (or groups of Unitary Councils where no County Council existed) in the preparation of County Structure Plans and these in turn provided the framework for District and Unitary Councils when preparing Local Plans (which allocated specific sites and contained detailed policies and standards). This then was the rather dynamic planning regime that provided the organisational context for the 'new' regional planning work during the 1990s.

The London and South East Planning Conference (SERPLAN) was, until April of 2001, a regional planning body which represented the views of over 140 local authorities and provided advice to central government and its members on regional planning issues for the region. It's role has now been incorporated into The South East of England Regional Assembly (SEERA), although this chapter will concentrate its attention on the work of SERPLAN in the regional planning process, rather than that of SEERA.

The 1980s saw the low point for regional planning in England. The South East had three thin and scantily clad RPG's covering London (RPG3), the Outer South East (RPG9) and the Thames Gateway (RPG9a). The Thames Gateway (the Thames estuary down-river from London) was given its own Policy Guidance because it was an area for regeneration and renewal in RPG3 and RPG9. Central Government had taken the lead in producing these policy guidance notes and their ideology of minimal planning intervention was replicated in their contents. Indeed,

apart from strategic housing allocations for each county, readers of the guidance would be hard pressed to find a specific policy statement in any of them!

The 1990s saw the thawing of the monetarist hard-line developed by Margaret Thatcher and the 'conversion' of all major political parties to the concept of sustainable development. It was this changing context which hastened-up the review of the three RPGs and resulted in SERPLAN kick-starting their 'normal' policy review process in 1994.

The whole process took from December 1994 to April 2000, although the final version of the new RPG9 (which incorporated RGG9a, but not RPG3 which was reviewed at the same time by the London Planning Advisory Committee in close co-operation with SERPLAN) was not published by the government's regional office until March 2001 (GOSE, 2001). The policy-making process was progressed in three phases and these relate broadly to three different mechanisms of public involvement in policy development:

– The use of a 'Sustainability Panel' to guide the initial process
– The detailed drafting of policies by SERPLAN and the production and debate of a 'Consultation Draft Strategy'; and
– The Public Examination of the (amended) Draft Strategy in front of an independent panel of experts

The final stage of the process involved central government taking the Public Examination Panel's report (GOSE, 1999) and making amendments to the strategy in the form of a draft (and, subsequently, final) RPG9 document (GOSE, 2000, 2001). The 'story' of the strategy-making process will use this three-stage structure to analyse the public participation mechanisms that were used and the differential dynamics, interest configurations, actor networks, discourses and policy proposals which characterised them.

It should be emphasised here that there were variable levels of discretion available to choose these mechanisms. The Sustainability Panel was really the brain-child of the then chief planner at SERPLAN who saw this 'stakeholder' approach as an appropriate vehicle to build a strategy which had 'sustainable development' as it's touchstone. Remember that this came hot on the heels of the Rio Earth Summit, with its call to localise the spirit and operational principles of Agenda 21. The more formal stages of Consultation and Public Examination were laid down in Government Guidance (DETR, 1992, 2000) and consolidated by past professional practice. However, the guidance was not overly prescriptive and SERPLAN officers and members were able to organise the public consultation as they felt fit, whilst the chair of the Public Examination panel had the authority to select those participants he felt were appropriate.

8.3.1 Phase 1: The Use of Fora

In order to incorporate the principles of sustainable development in to its regional planning strategy (i.e. it's 'advice' to central government) SERPLAN established a Sustainability Panel in 1994. This Panel drew its membership mostly from local

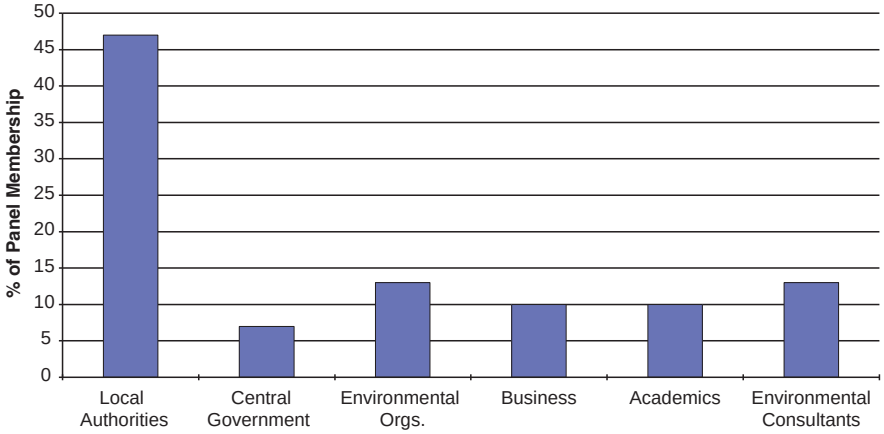

Fig. 8.2 Membership of the sustainability panel

authorities but also included representatives and experts from the private sector, voluntary (NGO) sector and local universities (see Fig. 8.2). The Panel sat along side a number of other (policy-drafting) Working Groups, most of which were staffed by SERPLAN and local authority planners. The task of the Panel was to develop a framework which could be used by the other groups to develop and appraise the emerging regional strategy.

Between 1994 and 1996 a number of tasks were completed by the members of the Panel including the preparation and formal approval/adoption of:

- A framework document of 'Sustainability Principles' (SERPLAN, 1995a) which provided an holistic and relatively robust outline from which to build sustainable regional planning policies. It placed emphasis on five main principles (futurity; environment; development; equity and participation) applied through seven features of sustainability (including demand management; carrying capacity; diversity; and quality of life).
- A participation strategy (SERPLAN, 1995b) which emphasised the need to target representative groups at the regional level, but also to feed-in the inputs from various fora already established at the sub-regional and local levels; and
- A methodology document (SERPLAN, 1996) entitled 'Strategic Environmental Assessment: A Methodology and Appraisal Framework for the Review of the Regional Strategy' which was intended to be used to appraise the policies contained in the Regional Planning Strategy and monitor its subsequent implementation.

The Sustainability Panel contained a selective range of stakeholder groups but, despite the stated aims of the 'Participation Strategy', the membership remained skewed towards local authorities. Nevertheless, the Panel did bring together the energy and expertise of a number of individuals from non-governmental organisations to support the development of policy-making frameworks aimed at sustainable development. Furthermore, the Panel used a relatively open system of informal

meetings in which brain-storming and debate were the main means to progress action (Doak, Stott, & Therivel, 1998) and that this led to some intense periods of creative debate in which power 'flowed' through the group, depending on the quality of the arguments constructed (Innes & Booher, 1998).

However, it was not without its problems. It was difficult to keep people interested and involved in the work of the Panel and a core group slowly evolved who were responsible for developing the Appraisal Framework. It was significant that no business representatives were involved directly in this stage of the work although they were not critical of the broad framework, especially when the principle of 'development' was included in the working definition of sustainability. A portent of the conflict which was to arise later was provided when initial appraisals of the evolving policies showed that some of the working groups (especially the Economic Studies Group, which had significant business representation on it) were not 'in tune' with the principles suggested by the Panel. Within the Panel itself much debate and argument took place around the definitions and criteria to be used in the Appraisal Framework. However, in the end a broad (socio-economic) definition of sustainable development was constructed and a moderately holistic set of criteria were applied in the Framework which was to guide the policy-making process.

1996 saw the new Labour Government take power and ironically this was to contribute to a 'squeezing' of the range of interests involved in policy-making and a truncation of debate. Richard Cabourne, the Minister put in charge of Regional Planning, requested the speedy production of the new Regional Strategy and this necessitated a 'centralisation' of policy-drafting in the hands of the planners in the SERPLAN Secretariat. The Draft Strategy was required by the end 1998 in order to set the planning framework for the proposed Regional Development Agencies and Assemblies being proposed by the new Government.

8.3.2 Phase 2: Public Consultation

In October 1996 the Sustainability Panel was terminated and its core members were incorporated into one of SERPLAN's new working groups; the Assessment, Monitoring and Implementation Group (AMIG). The relatively open, but time-consuming, policy-drafting process being undertaken by the other working groups was inverted and their role changed from drafting policies to checking the output from the SERPLAN Secretariat. Interesting enough it was the framework provided by the Sustainability Panel which became the structuring device for the Secretariat's work.

The draft strategy (SERPLAN, 1998a) was organised around the principles and themes of sustainable development and aimed at urban renaissance and regional re-balancing. This was expressed in six key policy themes or packages and supported by eight key targets or indicators. The key themes were:

1. Environmental enhancement and natural resource management
2. Encouraging economic success
3. Opportunity and equity

4. Regeneration and renewal
5. Concentrating development and
6. Sustainable transport

Part of this regional re-balancing was to be achieved by the designation of seven Priority Areas for Economic Regeneration (where development would be encouraged) and three Areas of Economic Consolidation to the West of London (where further development would be restrained).

The level and distribution of new housing development was dealt with, very late in the process, by outlining three options for accommodating the forecast housing needs of the region. All three options under-provided in relation to Government forecasts, with SERPLAN arguing that 20–25% of new households would not be able to afford market housing and that programmed social housing supply would be inadequate to cater for their needs. This left a range of housing provision (of between 875,000 and 914,300 for the 1991–2016 period) which the three options sought to distribute between the 12 counties making-up the region. Option 1 went for the lower level of 875,000 whilst options 2 and 3 provided for the upper figure of 914,300. Option 2 distributed the housing allocation more towards the western Areas of Economic Consolidation whilst option 3 targeted more development towards the Priority Areas for Economic Regeneration.

The public consultation exercise was undertaken over a 3 month period in mid-1999 and involved:

– The distribution of 3,000 copies of the Consultation Draft Strategy to member local authorities and regional-level organisations
– The circulation of 25,000 copies of a summary document to local organisations (via member local authorities)
– Eleven sub-regional meetings requested by local organisations
– Two regional seminars on economic issues (organised by the Government Office for the South East) and
– A press conference, held to launch the publication of the Draft Strategy

The consultation process was ‘structured’ to some extent by 16 questions which SERPLAN had set. These questions trod a fine line between focusing on the key issues and closing down debate. For instance the opening question asked, “Are there ways in which the strategy could do more to meet the stated objectives of sustainable development?” This suggests that the model of sustainability advocated by the Sustainability Panel was now an established and uncontested basis for the regional strategy!

Many local authorities organised their own consultation on the Draft Strategy. For instance, Reading Borough Council held four Area Consultative Workshops and a Borough-wide Summit Meeting to draft out a ‘community response’ to the SERPLAN document. This process focused on the local implications of the regional strategy at the neighbourhood level and utilised a network of community and environmental groups which is well-developed in the town. The ‘quality’ of this local consultation on the SERPLAN draft strategy was applauded in a report prepared by a coalition of Local Agenda 21 groups in the borough (The Reading

Globe Alliance, 2000). However, it is likely that the Reading experience is rather exceptional and that a good proportion of local authorities undertook only limited consultation with their local communities.

The response to the consultation exercise was quite impressive. Figure 8.3 shows the range of organisations that produced written responses to the Draft Strategy.

In total there were 840 responses including 117 from local authorities, 281 from parish or town councils, 83 from members of the public and 359 from various other representative organisations. The significant input from local interests, led by parish councils, can clearly been seen. After local authorities (with their variable levels of consultation with local communities) and individual members of the public come business interests, often ably supported by private planning consultants.

Most respondents were supportive of the principles of sustainability which underpinned the strategy and with the key themes and policy packages. Most respondents supported the designation of Areas of Economic Consolidation and Priority Areas for Economic Regeneration and a majority backed the lower housing provision option. However, a significant minority of those responding (mostly, but not exclusively, business interests) expressed concern with the economic and housing policies outlined in the Draft Strategy. These centred on the under-provision of housing in relation to forecast needs (which was seen to be against the principles of sustainable development) and the overall economic impacts of restraining business (and housing) development in the buoyant western areas of the region. Thus, the

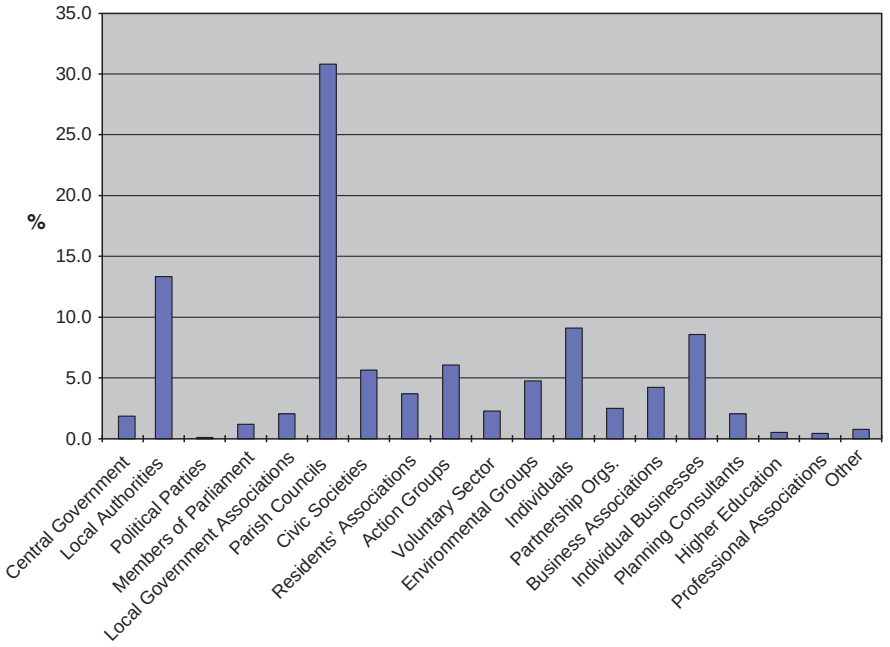

Fig. 8.3 Respondents to consultation draft

concept of sustainability was once more being opened-up and contested, both on its own terms and in relation to alternative priorities provided by concepts of 'economic competitiveness'. Despite the broad support for the principles and many of the detailed policies in the Draft Strategy, it was this debate that was taken-up and explored at the subsequent Public Examination.

8.3.3 Phase 3: Public Examination

The final version of the Regional Strategy (SERPLAN, 1998b) submitted by SERPLAN in December 1998 was, in essence, little different from the Consultation Draft document; the general support provided by the consultation exercise legitimised the broad strategy and many of the detailed policies. A few changes in emphasis and wording were made, but most of the key policy themes remained the same. The main additions to the submitted document were the clarification, detailing and justification of the housing and economic policies at the centre of the strategy. In particular, SERPLAN rationalised the cautious approach to housing provision (still set below Government forecasts and proposing a minimum level of 861,700 dwellings) using a 'plan, monitor and manage' approach which had been aired by Government Ministers. The Priority Areas for Economic Regeneration had been extended to include rural areas suffering from economic and social decline and Areas of Economic Consolidation were renamed Areas of Economic Pressure. A new 'Spatial Implications' chapter provided more detailed policies for these areas.

The Public Examination into the Draft Strategy was held during May and June 1999. In line with (the then draft version of) Government guidance (DETR, 2000), it provided an opportunity for a Government-appointed panel and selected participants to informally discuss and test a number of themes and issues arising from the (Panel's) consideration of the draft guidance submitted by SERPLAN. The Panel was made-up of an independent chair (Stephen Crow) and three members drawn from the Government's Planning Inspectorate. After some discussion with the Government's Regional Offices and SERPLAN, the Panel focused down on 11 issues and invited a number of organisations and individuals to take part in the Examination, which was open to the general public.

The issues chosen for discussion were quite wide-ranging, although most time was inevitably given over to the main components of the strategy and the objections which had been made to it. The issues covered at the Examination were as follows:

– The Role and Purpose of the RPG
– Core Strategy
– Regional Economy
– Environmental Strategy and Countryside
– Housing and the Environment

– Quality of Life in Town and Country
– Development and the Supply of Infrastructure – Waste and Water
– Mineral Resources and Other Development
– Sustainable Transport Patterns
– Spatial Implications for Seven Specific Sub-areas and
– Implementation and Monitoring

The types of organisation invited to attend the Examination is shown in Fig. 8.4. It indicates the *average* number of organisations attending the Examination for each issue. Although the Panel sought to select participants to, "reflect the whole spectrum of opinion on each topic, and … wherever possible (to) include some people or organisations representing the ordinary residents of the region" (GOSE, 1999: §1.12), the dominance of business interests (or their hired planning consultants) is evident. The decision of the Panel to use SERPLAN as a surrogate or representative for the local authorities of the region also meant that SERPLAN was often left without the 'usual' wall of local authority support to help them argue the case against business organisations who were objecting to the submitted strategy.

Given the constellation of interests alluded to above, it is possibly not surprising that the submitted strategy received something of a mauling at the Public Examination and in the subsequent report produced by the Panel. Given the complex process of compromise and consensus it tried to achieve across the region, it was bound to have its fare share of anodyne and less that coherent policy statements. However, the Panel make it clear in their report that they did not buy into SERPLAN's view of sus-

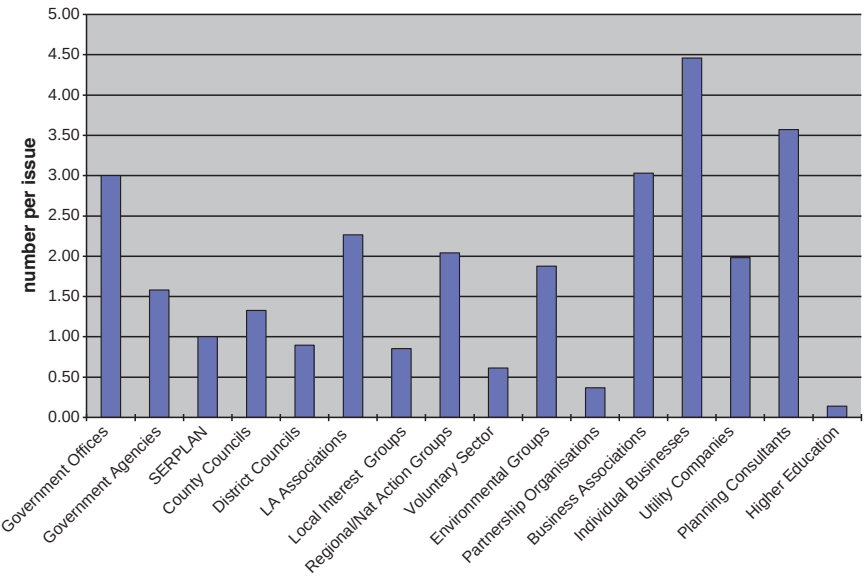

Fig. 8.4 Organisations attending public examination (average number per issue)

tainable development with its precautionary 'plan, monitor and manage' approach to housing provision. The Panel's recommendations included:

– Increasing the overall housing allocation by 25% to 1,098,500
– Deleting reference to Areas of Economic Pressure and replacing it with a policy focusing on smaller areas where congestion and labour supply problems should be tackled positively
– Taking a more selective approach to the Priority Areas for Economic Regeneration so that resources can be targeted on those with most potential
– Proposing the designation of Areas of Plan Led Expansion (APPLE's…to go with the PAERs!) including locations near to the airports at Gatwick and Stansted and further development at Milton Keynes and Ashford, Kent

In response to those who might criticise their report, the Panel posed,

> *"[T]wo of the questions that were never far from our minds as we conducted the examination –*
>
> - *do you want the economy of the South East to stagnate, or at any rate to perform at its less than full potential, and*
> - *do you want the planning process to frustrate or at any rate do less than it could to assist, the desire of people to have a decent home to live in?"*

To those that might say 'no' to both these questions, the Panel felt, "that there was no alternative" but to change the strategy in the way they recommended.

The Panel's report was considered by the Secretary of State for the Environment, Transport and the Regions and a final draft version of RPG9 was published for consultation in March 2000. This was, of course, Central Government's version of the Regional Strategy and, although it rejected the Panel's recommendation to substantially increase the housing allocation, it did suggest a 'compromise' figure above SERPLAN's. Furthermore, it did respond to the 'economic competitiveness' argument (much of it promulgated by the newly established South East of England Regional Development Agency; SEEDA) by including the Areas of Planned-Led Expansion advocated by the Panel. Thus, although Central Government accepted and supported the sustainability discourse developed by SERPLAN, it modified that policy package to incorporate (in a much stronger way) the alternative discourse being pressed by the Region's business and development interests. One other change of note in the Government's Draft RPG9 was the restructuring and pairing-back of the regional strategy into standard topic areas (e.g. housing, employment, transport) with a distinct land-use ambit. The 'holistic regional strategy' prepared by SERPLAN (and indeed requested by the Labour Government when it was elected) gave way to the 'normal' land-use focus of planning policy guidance.

Consultation on the Government's Draft RPG9 ended in June 2000 and a final version of the Regional Planning Strategy was produced in March 2001 (SERPLAN's last act before it was abolished was to issue a total rejection of the proposed housing figures). The 'new' Regional Assembly and SEEDA spent some time integrating the planning strategy into their other strategies (the most relevant of which were the Regional Economic, Transport and Sustainability Strategies) before launching a review which has just (early 2007) been through its own

Examination in Public. Although the SERPLAN era has now come to an end, its influence has continued through into the new regional planning strategy-making process, which has used a similar set of participative arrangements. However, that, as they say, is another story.

8.4 Conclusions

As we have noted, the process of 'public participation' in the development of the new regional planning strategy for South East England was characterised by distinct phases of activity. Each phase involved different approaches and styles of engagement with varying configurations of interest. The dynamic balance of interest involvement in the three phases is summarised in Fig. 8.5 below. This illustrates, or at least suggests, the increasing 'opening-up' of the policy-making process to business interests and the 'closing-down' of participation opportunities for local interests that occurred at the Public Examination. It also serves as a background for our discussion of each of the three phases in relation to some of the ideas overviewed in Section 8.1 of this chapter.

The Sustainability Panel was a bold attempt to build consensus amongst some (but certainly not all) of the key stakeholder interests in the region. It did this by developing a framework of sustainability principles and appraisal criteria which could be used to structure and guide the policy-making process. Its style was relatively open and informal and it utilised brain-storming and task group workshops

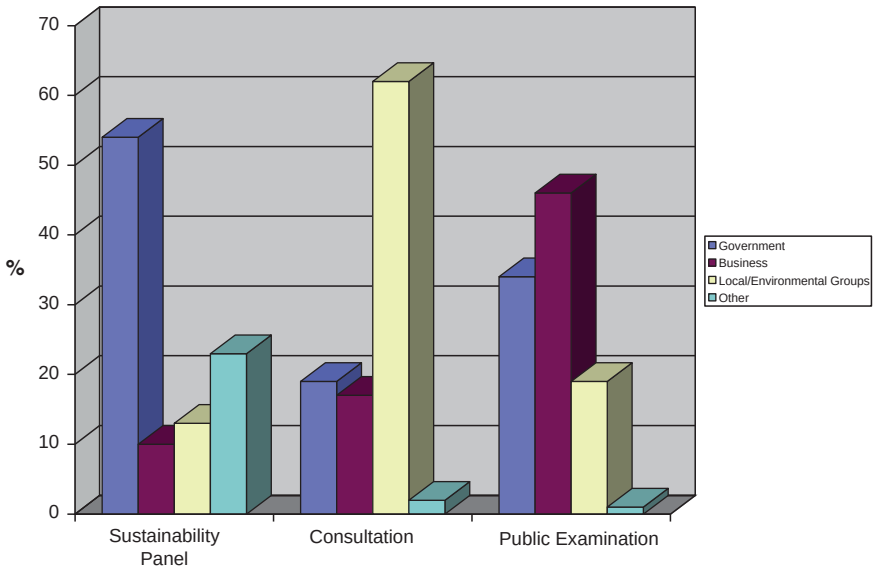

Fig. 8.5 Interest representation during the three stages of public participation

to forge a range of documents which became key ‘texts’ in the development of SERPLAN’s ‘sustainability discourse’. That discourse was contested both from within the Panel and from without, and the eventual framework used by SERPLAN reflected that process to some extent. By the end of the process the officers and elected Members of SERPLAN felt confident enough to use this definitional framework as the basis for the Consultation Draft Strategy (SERPLAN, 1998a). It could be argued that the collaborative efforts of the Sustainability Panel had a profound impact on the shared understanding of key stakeholders at the regional level.

It is notable that the ‘economic competitiveness versus sustainability’ debate first arose during the time of the Sustainability Panel. It was unfortunate that this debate was not fully aired either within the Panel or, as suggested in the Panel’s Participation Strategy, in a wider regional forum of stakeholder groups. However, the pressure placed on SERPLAN to develop their regional strategy quickly fore-closed this more extensive type of consensus-building. The failure to resolve or reduce this tension was to come back and haunt SERPLAN at the Public Examination.

The formal consultation stage of the draft strategy remains the key period in which a range of local and community interests were invited to make a contribution to the development of policy. As regional level participation goes, it was a relatively thorough exposure and discussion of the issues. Some local authorities went out of their way to take regional issues down to the neighbourhood level and explore the implications of the proposed strategy. However, the final results made a rather indirect impact on the submitted strategy, being aggregated up in the form of supporters and detractors from the policies that SERPLAN were advocating.

The ‘democratic mandate’ that SERPLAN took into the Public Examination from the consultation exercise was quickly eaten away by the structure, style and organisational biases evident in the Public Examination. The ‘sustainability discourse’ was dissected by an astute and unconvinced Panel, in front of a less than sympathetic group of attendees. The political compromises and fudges required to build consensus between local interests in the region were exposed without much opportunity for those interests to rescue their case. Although the overall framework of sustainable development held firm, the detail which had been added, belated, to the strategy did not always sound convincing. The lop-sided configuration of interests attending the Examination were able to re-establish and progress the ‘competitiveness’ discourse to such an extent that it became the question which underpinned the Panel’s daily deliberations.

Although the Government’s response to the Panel’s report was more of a (political?) compromise that anything else, it took on board the competitiveness arguments advocated at the Examination and watered-down the precautionary restraint policies proposed and supported by the local authorities and local citizens of the South East. The tensions between and within these two discourses continues. The Regional Assembly grappled with this as it tried to integrate the various regional strategies into a coherent whole; something that defeated SERPLAN. The Assembly (SEERA) has had the advantage of having a representative structure which includes a proportion of key (economic, environmental and social) stakeholder groups in decision-making. This has not prevented the continuation of

heated debate around these issues during the latest Examination in Public, but at least this time the range of stakeholder representation in that important arena has been both wider and more 'localised', as it has involved a series of examinations in different parts of the region.

In terms of the quality of the decision-making process, we should note that different types of information and knowledge were drawn upon and utilised during the different stages. The Sustainability Panel facilitated the input of a selective range of, mostly, expert stakeholder groups. The negotiated outcomes of this process were often innovative and holistic (e.g. the sustainability framework and the SEA methodology), but it was unable to include a wide range of stakeholder perspectives due, in part, to its regional focus and its underpinning professional (and local governmental) culture. This was addressed more fully during the public consultation stage when a much wider range of local and sub-regional interests became involved in focussed workshops, written responses and locally-based events. However, this stage was time-limited and often highly structured: the draft strategy had already been produced and local and/or non-technical knowledge and information merely 'shifted the deck-chairs'. A bigger shift in policy was evidenced by the Public Examination and subsequent report. Here, another selection process allowed business interests to support their 'competiveness discourse' using research and information from planning and economic consultants to critique the 'policy consensus' constructed during the previous stages of the process.

Thus, the SERPLAN case study points towards the important role played by a number of 'institutional spaces' at key points in the process of decision-making. Environmental and sustainability criteria were constructed and utilised during some of these but down-played or erased during others. As mentioned earlier, the ability of individual 'actors' to design those spaces in-line with the principles and spirit of sustainable development is somewhat constrained. However, the institutional building processes continue, as do the debates, and new spaces are being created (and destroyed) all the time.

References

Arnstein, S. (1969). A ladder of citizen participation. *Journal of the American Planning Association, 35*(4), 216–224.

Callon, M. (1986). Some elements of a sociology of translation: Domesticating the scallops and fishermen of St. Brieuc Bay. In J. Law (Ed.), *Power, action, belief: A ne w sociolo gy of knowledg e?* London: Routledge and Kegan Paul.

Cawson, A. (1982). *Corporatism and welfar e: Social policy and state intervention in Britain* . London: Heinemann.

Department of the Environment, Transport and the Regions (DETR) (1992). *Planning policy guidance note 12: Development Plans*. London.

Department of the Environment, Transport and the Regions (DETR) (2000). *Planning policy guidance note 11: Regional planning*. London.

Doak, A. J., Stott, M., & Therivel, R. (1998). From SEA to sustainability: The life and times of the SERPLAN sustainability panel. *Regional Studies, 32*(1), 73–78.

Fischer, F. & Forester, J. (1993). *The argumentative turn in policy analysis and planning*. Durham, NC: Duke University Press.
Forester, J. (1989). *Planning in the face of power*. Berkeley, CA: University of California Press.
Giddens, A. (1984). *The constitution of society*. Cambridge: Polity.
Government Office for the South East (GOSE) (1999). *Regional planning guidance for the South East of England: Public examination May/June 1999 – report of the panel*. Guildford: GOSE.
Government Office for the South East (GOSE) (2000). *Draft regional planning guidance for the South East of England: Proposed changes*. Guildford: GOSE.
Government Office for the South East (GOSE) (2001). *Regional planning guidance for the South East of England (RPG9)*. Guildford: GOSE.
Habermas, J. (1987). *The theory of communicative action*. Cambridge: Polity.
Harloe, M., Pickvance, C. G., & Urry, J. (1990). *Place, policy and politics: Do localities matter?* London: Unwin Hyman.
Harvey, D. (1973). *Social justice and the city*. Oxford: Blackwell.
Healey, P. (1996). *Collaborative planning: Shaping places in fragmented societies*. London: Macmillan.
Healey, P., McNamara, P., Elson, M., & Doak, A. (1988). *Land use planning and the mediation of urban change: The British planning system in practice*. Cambridge: Cambridge University Press.
Healey, P., Cameron, S., Davoudi, S., Graham, S., & Madani-Pour, A. (Eds.) (1995). *Managing cities: The new urban context*. Chichester, UK: Wiley.
Innes, J. E. & Booher, D. E. (1998). *Power and planning in the information age: Consensus building as action strategy for the network society*. Paper presented at the *12th AESOP Congress*; July 1998. University of Aveiro, Portugal.
Lindblom, C. (1977). *Politics and markets*. New York: Basic Books.
Low, N. (1991). *Planning, politics and the state: Political foundations of planning thought*. London: Unwin Hyman.
Marsh, D. & Rhodes, R. A. W (Eds.) (1992). *Policy networks in British government*. Oxford: Oxford University Press.
Murdoch, J. (1997). *Tracing the topographies of power: Spaces of prescription and negotiation in actor-networks*. Paper presented at the Actor Network and After Conference; July 1997. University of Keele, Keele, UK.
Parker, G. & Wragg, A. (1999). Networks, agency and (de)stabilization: The issue of navigation on the River Wye, UK. *Journal of Environmental Planning and Management, 42*(4), 471–487.
Saunders, P. (1979). *Urban politics: A sociological interpretation*. London: Heinemann.
Saunders, P. (1981). *Social theory and the urban question*. London: Hutchinson.
SERPLAN (1995a). *Sustainability principles*. RPC 2867R. SERPLAN.
SERPLAN (1995b). *Working with the public*. RPC 2762, SERPLAN.
SERPLAN (1996). *Strategic environmental assessment: A methodology and appraisal framework for the review of the regional strategy*. SERP 68, SERPLAN.
SERPLAN (1998a). *A sustainable development strategy for the South East: Public consultation*. SERP 400, SERPLAN.
SERPLAN (1998b). *A sustainable development strategy for the South East*. SERP 500, SERPLAN.
The Reading Globe Alliance (TREGA) (2000). *Local government and the consultative process*. Reading Borough Council, Reading.

Chapter 9
Concepts of Participatory Decision-Making in Dutch Infrastructure Planning

Johan Woltjer

9.1 Introduction

Continued growth in traffic volume and infrastructure facilities such as airports, railroads, and highways can lead to a variety of environmental problems. Car traffic in particular consumes energy, produces congestion, causes accidents and pollution. Traffic is also a major generator of noise nuisance. Accordingly, a major challenge for infrastructure planning is to combine economic growth with an acceptable use of the available territory, nature, and biodiversity, and a restriction on environmentally harmful emissions.

In a small, densely populated, country, such as the Netherlands, these environmental problems often emerge as highly complex decision-making situations that feature conflicting interests. Consequently, Dutch infrastructure planners find it difficult to guarantee the participation of all these interests and deliver good quality and environmentally sound outcomes.

In the literature on participation, many frames of reference exist about the position and merit of participatory decision-making. This chapter aims to achieve an understanding of these frames of reference by elaborating on notions of quality, and connecting these concepts to the views of project managers working in the Dutch infrastructure planning field. The empirical evidence includes literature, both theoretical and practical, and two surveys amongst experienced practitioners.

Often inspired by the international literature, Dutch infrastructure decision-making processes have increasingly endorsed participatory approaches (see for example Enthoven, 2005; Glasbergen, 1995; Hendriks & Tops, 2001; Heuvelhof & Termeer, 1991; Huigen, Frissen, & Tops, 1993; Teisman, 1992). Leading Dutch institutions such as the Scientific Council on Government Policy consider that environmental decision-making requires opportunities for the active involvement of a multiplicity of actors or 'stakeholders' (WRR, 1998).

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F.H.J.M. Coenen (ed.), *Public Participation and Better Environmental Decisions*,

These remarks may suggest that there is an accepted representation of, and a general agreement on, the meaning, forms and level of participation. In reality, however, considerable ambivalence and disagreements exist. The objectives of participatory decision-making vary among project managers and government officials, interest groups, and citizens. Overall, there is no clear vision of what successful participation means. This chapter focuses on the concept underlying this variety of views. These lead to frames of references for use in participatory decision-making.

9.2 Dutch Infrastructure Planning

In Dutch infrastructure planning, the Ministry of Transport, Public Works and Water Management co-ordinates strategic planning in order to improve accessibility, stimulate competitive transport, and strengthen important infrastructure such as Rotterdam Harbour and Schiphol Airport. At the national level, the Ministry of Transport is the most important infrastructure developer. The regional offices of the Ministry elaborate the strategic plans through more detailed operational projects.

All major national infrastructure projects in the Netherlands follow the procedure set down in the Road and Rail Routes Act, which was adopted in 1993. The Act provides for an integrated procedure for constructing or altering national railways and main roads. The procedure includes a Route Determination Plan and an Environmental Impact Assessment (EIA). It also arranges for interagency consultation and public involvement. This is typical of Dutch planning, which is considered a highly organised and collective activity. Consensus-oriented approaches have contributed to a well-established system of public participation and consultation. Planners in the Netherlands spend a considerable amount of their time in formal and informal consultation meetings with institutionalised interest groups and government agencies.

The Dutch system for infrastructure development has a strong hierarchical system involving different levels of administration. Despite the hierarchical set-up, provinces, municipalities and interest groups can influence decision-making through meetings and consultation procedures. All government levels have competencies that are related to the justifiable concerns of stakeholders and that are appropriate for addressing at that level. For example, the regional offices of the ministry are responsible for carrying out projects that ensue from national policies. It is at this level that project managers most often follow participatory strategies (e.g. RWS NH, 1995).

The text boxes (Boxes 9.1 and 9.2) below provide examples of typical national and regional infrastructure planning projects in the Netherlands. The examples demonstrate that existing standards and rules shape the relationships between government and participants. Participatory processes in Dutch infrastructure development situations always evolve as a supplement to standardised procedures. In this sense, participatory decision-making is regulated to a certain degree by existing formalities.

Box 9.1 Example Amsterdam Airport Schiphol

A typical example of national participatory decision-making is the decision-making process over Amsterdam Airport Schiphol. By the 1990s, Amsterdam Airport Schiphol, the Netherlands' main international airport, had grown to be one of most important airports in Europe. Finding a balance between all the claims to the area was a major problem that had to be solved. Collaboration and consultation were considered necessary between several government agencies. A few interested parties entered a participatory process in order to draw up the 1991 'Plan of Approach for Schiphol and Environs' (PASO). Following this, several impact statements, and the government's national key planning decision were drafted. The key planning decision was based on the PASO. It included a maximum limit on the volume of air passengers for Schiphol of 44 million, intentions to link the airport to the future high-speed train network – which would limit aircraft noise and contribute to maintaining air quality – and a new parallel fifth runway which promised considerable advantages for the quality of the living environment close to the airport.

Typical of many Dutch infrastructure planning situations, everyone was given an opportunity to express their views on the key planning decision. The process was finalised through public consultation, the distribution of information, opportunities to present written objections, as well as public hearings in 1994. The results of the consultation process were integrated into the definitive plan which was approved by Parliament in December 1995. The main design of the Schiphol plans, and especially the PASO agreement, however, had been established by a few major corporate bodies only.

Box 9.2 Example A9 motorway

An example of a characteristic regional case is the A9, a motorway that runs right through the centre of the town of Badhoevedorp. Clearly, this unfortunate situation has led to inconvenience and harmed environmental quality. Since 1993, the Minister had studied a diversion of the motorway around Badhoevedorp. To this end, a draft Route Determination Plan for the A9 was drawn up. The A9 scheme was a typical Road and Rail Routes Act project with established consultation opportunities for everyone.

As a typical Road and Rail Routes Act project, the regional office of the Ministry of Transport needs to study the project and guide the planning process through official and administrative consultations. The Act prescribes that the regional office has to consult with regional and municipal governments. Typical of participatory decision-making in Dutch infrastructure planning, to supplement these formal interactions, the North-Holland Provincial office regularly deliberated with interest groups. For instance, during informal

(continued)

Box 9.2 (continued) deliberations about the initial plan for the A9 motorway, the Dutch Railway company, as well as a citizens' council, a local environment group, and a regional business organisation participated with government agencies in the preparation of the project. For this purpose, the regional office co-ordinated so-called reference board groups. The reference board group for environment, for instance, discussed mitigation and compensation measures. The reference board groups may well have improved the understanding of the different problem perceptions by the participants. Nevertheless, the ultimate selection of the contributions by the participants remained in the hands of the Ministry.

9.3 A Matter of Quality

An important basis for views on participation relates to the notion of quality. In its basic meaning, the quality concept argues that participation is relevant if it somehow enhances the quality of decision-making. Generally, people that are actively involved in infrastructure decision-making situations have different concepts about the function, necessity, and range of participation within a democratic decision-making process. Important features include the directness of participation and the question as to whether decisions are to be made by consensus or by majority. The combination of these various features leads to different types of democracy (see for example Dahl, 1982; Elster, 1998). In direct participation, citizens make decisions themselves. Direct participation of all members of society is central to types of democracy such as deliberative democracy and plebiscitary democracy (Cronin, 1989). In indirect participation, on the other hand, representatives decide. Consensus democracy, for example, aims at achieving a broadly-based consensus to support its decisions. It involves indirect participation of citizens through representatives or delegates (Lijphart, 1984). In indirect participation, participation occurs by means of elections or via established interest groups.

An important view in terms of quality of decision-making is that of pragmatism. Pragmatism refers to a theory of knowledge, which holds that the truth-value of an idea is to be found in its practical application in everyday life. Pragmatism rejects the idea of universally valid laws that explain all behaviour and it rejects the notion of objectivity as an unbiased principle (Verma, 1996). Pragmatism holds an attitude of "… looking away from first things, principles, 'categories', supposed necessities; and of looking towards last things, fruits, consequences, facts" (James, 1967: 380). In practice it often refers simply to doing something that works in a certain context. Pragmatism, therefore, is strongly related to the concepts of effectiveness and efficiency.

Effectiveness in participation in infrastructure planning is based on reaching agreements and delivering support and acceptance. Effectiveness is important because the ultimate goal of a planning actor always involves making changes to reality. Every plan-making effort, and this includes participatory decision-making,

is only useful if activities are undertaken to reach results that will have more effect than no activities, in the light of the goals that have been determined (Mastop, 1987). Furthermore, effectiveness is achieved by interaction and communicative processes in which intentions are handed over from one actor to another (Boelens, 1990). In operational terms, indications of an effective planning process include a strengthening of the use of knowledge, a mobilisation of creativity, ideas and information of 'others', reaching goals, getting good results in terms of coherence, spatial quality and sustainability, and support and satisfaction about the effects. Effectiveness also includes unexpected results and non-material results such as social, intellectual and political 'capital' (see Innes, Gruber, Neuman, & Thompson, 1994).

Efficiency relates to the extent of decisive action. Actors can increase efficiency if they attune their ways of working to the working procedures of other actors (Teisman, 1992). Sometimes, planners need to proceed slowly in order to let the decision-making process proceed efficiently. Susskind and Cruikshank (1987) have used the adage 'to go slow to go fast' to illustrate this type of efficiency. In operational terms, efficiency is used to show whether participatory decision-making in a project has contributed to: time gains, less deceleration over the long term, savings in cost, and less expenditure in the long term. In short, signs of efficiency are described in terms of time and costs. Ideally, participatory decision-making prevents delays that emerge because of, for example, societal protest and it keeps expenditures down.

9.4 Pragmatic Conceptions

An assumption in this chapter is that people engaging in participatory strategies have different idealistic points of reference from which to understand participatory decision-making. This section explores to what extent particular participatory approaches could be expressions of the underlying issues of quality. The following sections look at the way these issues may determine participatory decision-making usage, and express a preference for a certain participation mode. It is assumed that the identification of the issues may help in understanding differences in participatory decision-making attitudes.

Whereas much of the literature stresses the democratic-related arguments surrounding participatory decision-making, project managers tend to be pragmatic and stress efficiency and effectiveness. Policy papers and documents written by the Dutch Ministry of Transport (Altena, 1997; RWS, 1997; RWS NH, 1995, 1996; V&W, 1996, 1997) emphasise reasons of efficiency and effectiveness for using participatory decision-making approaches. As such, planning practitioners in particular use pragmatic logic.

In the planning of airports, railroads, and highways, pragmatism is reflected in an emphasis by policymakers on functional arguments for participation. This emphasis includes arguments such as:

– Participatory decision-making can improve the use of knowledge and information from a wide variety of sources and experiences, and mobilise innovative ideas by participants.

- Participatory decision-making will help facilitate the reaching of project goals and improve the intended effects as it makes the policy process appropriate to particular circumstances and needs.
- Participatory decision-making will help to save time and lead to a shorter decision-making process over the long term.
- Participatory decision-making will help save development costs at later stages of the decision-making process.
- Participatory decision-making will allow the discovery of win-win solutions for, and gains by, participants.
- Participatory decision-making will improve public support and acceptance, and will help to construct consensus and partnerships in anticipation of possible conflicts.

Government studies such as RWS (1997) and V&W (1996) present participatory strategies as ways to save money and time in the long run, improve public confidence in government, and provide information about the needs and desires of society. Open public involvement is also expected to lead to a better foundation for decisions as it will allow for local knowledge that would otherwise not take part in the processes of preparing plans, projects and decisions. Participatory decision-making, then, promotes the use of information resources such as other social, political or professional actors. This kind of knowledge and additional information provides a broader opportunity to discover and consider alternative solutions.

Consequently, following practical views, participatory decision-making is a means to generate relevant information about possible planning impacts and affected participants. In this sense, information flows from a participant to the planner. This may include information about the interests and needs of people affected by planning. Planners may think they can react quicker and more precisely to demands 'from outside' with this kind of information. The purpose is not to involve individuals in the planning process but merely the early recognition of resistance in order to achieve 'trouble-free' completion. In this sense, the Ministry's concept of participatory decision-making is that it should lead to more control over the planning process and its outcome (V&W, 1998).

From a pragmatic view, studies by the Ministry of Transport emphasise that positive results of participatory decision-making are related to the construction of agreements while planners remain in a controlling position. The participants not only include public parties, but also a variety of private actors that have the resources and means of power that can be decisive for the success of policies and plans. Especially a 'sense if ownership' of a plan or project can ease implementation.

A pragmatic answer to the question 'why is participatory decision-making needed' is related to the quality of the outcome or results that participatory decision-making delivers. The meaning of participatory decision-making, then, lies in its consequences of application. An investment in participatory decision-making can be a gaining of time, a generator of support, relevant knowledge, and even control in the long term. Given an open attitude, infrastructure planners expect to incorporate good ideas and good will in the 'planning products' and thus arrive at an effective plan.

On the other hand, pragmatic considerations also raise concerns as to whether participatory decision-making approaches could lead to the consumption of a massive amount of time in planning processes. In line with Latour (1987), in this regard, people simply do not have the time, or find it unnecessary, to continuously participate in decision-making. Further, infrastructure planning may be too complex and require too much specialised knowledge to be carried out using broadly-based participation. It may also require a high degree of homogeneity of interests. Overall, for infrastructure planning, a participatory strategy may not always be desirable. It requires different modes for different projects.

Recent projects in Dutch infrastructure development have established perceived bounds, or limits, in using participatory decision-making in practice (Woltjer, 1998). Participatory decision-making is primarily effective in terms of support and acceptance. Considering their public and political responsibilities, project managers do not easily overstep the limits of decision-making conventions. Consequently, government officials seek compromise between paying attention to participatory processes and following formal procedures. It often remains unclear where the balance should be. As a consequence, planning practitioners often avoid the risk of bringing everything up for discussion. Participatory decision-making practice, therefore, often features dialogues, negotiations, and discussions only on partial aspects of projects.

9.5 Conceptions by Planning Professionals

This section discusses the concepts of professionals that were found from two questionnaires. It is discussed to what extent pragmatic arguments about participation, as raised in Section 9.4, actually hold, according to a group of project managers from the Dutch Ministry of Transport. Firstly, results from a survey involving 58 project managers, mainly employed at the regional offices of the Ministry of Transport in the Netherlands, are discussed. In addition, some results will be presented from a questionnaire among 126 experienced employees of the Ministry. All respondents were graduate professionals. Most respondents had a technical background and 5 or more years of experience in the infrastructure development field. All the respondents have been involved in participatory decision-making initiatives. The results of these surveys are presented as aggregates of some of the answers that the respondents gave to questions about effectiveness and efficiency, and about what types of participatory decision-making had been applied for different projects (Table 9.1).

Some of the results of the first questionnaire are depicted in Fig. 9.1. This shows that the most identified *goals* of participatory decision-making were reaching a ‘win-win result’ and increasing the support and acceptance of the project. This was particularly true for projects with complex process characteristics such as considerable societal effects, many participants, and a range of opinions. In other projects, reasons to embark on participatory decision-making were strengthening knowledge and mobilising innovative ideas. These were all desired with projects with a high technical complexity.

Table 9.1 Conceptions by project managers for situational chances of success for participatory decision making (in number of respondents, n = 126)

Situations in which participatory decision making may be successful				Makes no difference	Don't know
Large project	29	Small project	18	78	1
Complex project	49	Simple project	27	46	4
National project	2	Local project	54	66	4
Expensive project	9	Inexpensive project	5	107	5
Big clashes of interests	64	Small contrasts in interests	18	42	2
Many interested parties	57	Few interested parties	12	55	2
Major intervention	53	Small intervention	7	63	3
Urgent project	23	Non-urgent project	20	80	3
Long-term project	15	Short term project	40	66	5
In problem analysis phase	27	In solutions phase	40	57	2
Abstract project	4	Concrete project	97	22	3

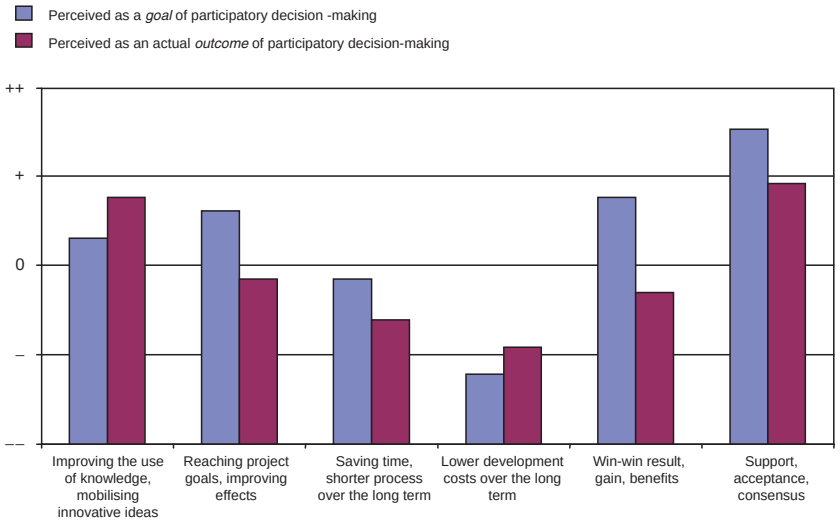

Fig. 9.1 Concepts of project managers concerning goals and outcomes of participatory decision-making (n = 58)

In terms of the actual *outcomes* of participatory decision-making processes, the respondents were satisfied about the use of knowledge and the support achieved. Their views varied greatly about reaching goals and improving effects, a major reason for participatory decision-making. The project managers were not content with the amount of time used in participatory decision-making. They also did not label the result as 'win-win', despite one of the main reasons for participatory decision-making

being to achieve a 'win-win' situation. Furthermore, strengthening knowledge and mobilising innovative ideas played an important part in the participatory decision-making approach. Achieving better goals and outcomes was considered important, but these were not always achieved by using a participatory decision-making mode.

Overall, project managers think that each project needs its own participatory approach. This means that, for some cases, processes based on indirect participation are most appropriate, while in others direct participation would be more effective. As depicted in Fig. 9.2, project managers are often reluctant to allow interest groups and citizens to take part in decision-making. If confronted with a technically complicated project, project managers aim their participatory processes towards improving the use of knowledge and new ideas. In situations dominated by process complexity, project managers aim at support and acceptance.[1]

This focus on results and differentiation by type of project shows again the emphasis in Dutch infrastructure planning on pragmatism. The view of infrastructure planners in the Netherlands concerning participatory decision-making is one that allows for the inclusion of the contributions of other participants only if these contributions will indeed have a practical effect. Consequently, a pragmatic approach towards participatory decision-making is geared towards specific, ad hoc, and piecemeal decision-making. This orientation is typical for infrastructure planning, which emphasises individual projects, rather than coherent, comprehensive plans.

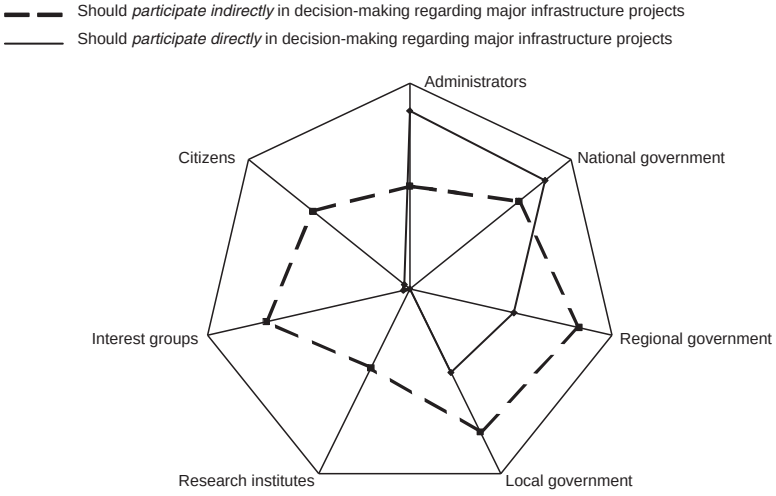

Fig. 9.2 Concepts of project managers about indirect and direct participation (n = 58)

[1] Technically complex projects were considered to include such characteristics as a high engineering sophistication, a need for multidisciplinary knowledge, and intricate causality patterns between impact and effects. Projects with process complexity included characteristics such as many participants, different views and conflicts, and considerable social impacts and uncertainty (see Woltjer, 1998).

9.6 Conclusion

This chapter has attempted to identify some of the underlying frames of reference concerning participation quality within planning systems and among the planners of Dutch highways, railroads, etc. Overall, the analyses of participatory processes in Dutch infrastructure planning have revealed that participation comes in different modes for different situations, and adopts different views. If infrastructure projects are comparatively complex, for example, participation processes are geared towards involving lay knowledge and innovative ideas. For projects with complex decision-making processes, project managers look more for support and acceptance.

The exploration of different views has shown that the concepts of project managers in Dutch infrastructure development is mainly pragmatic. Pragmatism emphasises that a good quality decision is to be judged by its practical application. Pragmatism means that for some situations, participatory processes are helpful, yet for other situations these processes are undesirable. Pragmatic project managers accept that existing conditions cannot always accommodate extensive participation and, if in such conditions participation is imposed, then undesirable outcomes may result. As a consequence, in infrastructure planning, non-participation or indirect participation through established formal procedures is an acceptable alternative. Moreover, participatory processes in Dutch infrastructure planning are highly regulated by existing formalities.

Without a doubt, environmental considerations play a role here. The challenge to regionally facilitate traffic and transport, and still pay attention to an adequate national use of the available territory, nature, biodiversity, and to environmentally harmful emissions, may well demand non-participatory directions by the government. In this sense, participatory decision-making may deliver a more effective and efficient process at the project level, but overriding environmental concerns demand an approach that safeguards representative democratic structures at higher decision-making levels whilst adopting a participatory decision-making style. According to Dutch infrastructure development adequate infrastructure development is not achieved by a participatory approach alone.

References

Altena, P. (1997). *Infralab-project A12 Ede-V eenendaal* {Infralab A12 project from Ede to Veenendaal}; paper presented at the regional planning conference ‘De aanpak van omgevingsplanning’. Zwolle, The Netherlands.

Boelens, L. (1990). *Stedebouw en planolo gie, een on voltooid pr oject: naar het communicatief handelen in de ruimtelijke planning en ontwerppraktijk* {Urbanism and planning, an unfinished project; towards communicative action in spatial planning and design}. Delft, The Netherlands.

Cronin, T. E. (1989). *Direct democr acy: The politics of initiative , r eferendum, and r ecall*. Cambridge, MA: Harvard University Press.

Dahl, R. A. (1982). *Dilemmas of pluralist democracy: Autonomy vs. control*. Yale studies in political sciences. New Haven, CT: Yale University Press.

Elster, J. (Ed.) (1998). *Deliberative democracy*. Cambridge: Cambridge University Press.
Enthoven, G. (2005). Representatief en participatief: Een tuussenbalans na 10 jaar interactief besturen {Representative and participatory: A review on 10 years of interactive governance}. B*estuurskunde, 2*, 21–29.
Glasbergen, P. (Ed.) (1995). *Managing environmental disputes, network management as an alternative*. Dordrecht, The Netherlands: Kluwer.
Hendriks, F. & Tops, P. W. (2001). *Politiek en inter actief bestuur, Inter acties en interpr etaties rond de ontwikk eling van het Nationaal V erkeers – en V ervoersplan* {Politics and interactive administration}. The Hague: Elsevier.
Heuvelhof, E. F. Ten & Termeer, C. J. A. M. (1991). Gebiedsgericht beleid en het bereiken van win-winsituaties {Area orientated policy and reaching win-win situations}. *Bestuurswetenschappen, 4*, 301–315.
Huigen, J., Frissen, P. H. A., & Tops, T. W. (1993). *Het project Betuweroute, spoorlijn of bestuurlijke co-productie* {The Betuwe line project, railway or administrative coproduction}. Katholieke Universiteit Brabant, The Netherlands.
Innes, J., Gruber, J., Neuman, M., & Thompson, R. (1994). *Coordinating growth and environmental management through consensus building*. California Policy Seminar Report. Berkeley, CA.
James, W. (1967). The pragmatic method. In J. J. McDermott (Ed.), *Writings of William James*. New York: Viking.
Latour, B. (1987). *Science in action*. Cambridge, MA: Harvard University Press.
Lijphart, A. (1984). *Democracies: Patterns of majoritarian and consensus government in twenty-one countries*. New Haven, CT: Yale University Press.
Mastop, J. M. (1987). Besluitvorming, handelen en normeren: Een methodologische studie naar aanleiding van het streekplanwerk {Decision-making, handling and standardising: A methodological study as a result of regional planning}. *Planologische Studies, 4*. Planologisch en Demografisch Instituut University of Amsterdam.
RWS (1997). *Open K euken: Zoektoc ht naar methoden voor inter actieve pr ocesaanpak* {Open kitchen: Zeeking methods for interactive project management}. The Hague, The Netherlands: National Head Office of Water Works, Infraplan.
RWS NH (1995). *Het open planpr oces, toepassing binnen pr ojecten?* {The open planning process, application within projects?}. Haarlem, The Netherlands.
RWS NH (1996). *Spelregels voor het open planpr oces, uitgangspunten en implementatie* {Rules of the game for the open planning process, starting points and implementation}. Haarlem, The Netherlands.
Susskind, L. & Cruikshank, J. (1987). *Consensual approaches to resolving public disputes*. New York: Basic Books.
Teisman, G. R. (1992). *Complexe Besluitvorming, een pluricentrisch perspectief op besluitvorming o ver ruimtelijk e inv esteringen* {Complex decision-making, a pluricentric perspective on decision-making over spatial investments}. The Hague, The Netherlands: VUGA.
V&W (1996). *Open deur en – werkdocument* {Open doors – working document}. The Hague, The Netherlands.
V&W (1997). *Draagvlak en maatsc happelijke acceptatie* {Support and public acceptance}. Rotterdam, The Netherlands.
V&W (1998). *Raamwerk integrale beleidsvorming hoofdinfr astructuur* {A framework for integrated policy making regarding major infrastructure}. The Hague, The Netherlands.
Verma, N. (1996). Pragmatic rationality and planning theory. *Journal of Planning Education and Research, 16*, 5–14.
Woltjer, J. (1998). *Interactieve planvorming, inventarisatie en evaluatie van praktijk – initiatieven* {Interactive plan making: An inventory and evaluation of practical initiatives}. TNO, Delft, The Netherlands: Opdrachtgever.
WRR (1998). *Ruimtelijke Ontwikkelingspolitiek* {Spatial development policy}. The Hague, The Netherlands.

Chapter 10
Local Agenda 21: 'Meaningful and Effective' Participation?

Frans Coenen

10.1 Introduction

'Local Agenda 21' (LA21) refers to the general goal set for local communities by Chapter 28 of the 'action plan for sustainable development' adopted at the Earth Summit in Rio in 1992. Chapter 28 is an appeal to 'local authorities' to engage in a dialogue for sustainable development with the members of their constituencies. This dialogue seeks for a new participation process where the communication between local authorities and all local stakeholders goes beyond existing and traditional consultation. By nature LA21 is therefore a participatory reform. What is unique about LA21 as a participatory reform is that Chapter 28 of the Agenda was developed at the supra-national level. LA21 is being actioned in more than 6,400 local authorities in 113 countries (CSD, 2002).

Given that LA21 is a supra-national initiative it leaves considerable room for cross-national variation as to how, when, and why, the LA21 idea becomes salient. The substance of any particular 'Local Agenda 21' will be related to the specific nature of the local community in question (its geography, demography, economics, society, and culture) (Lafferty & Eckerberg, 1998). In this respect Chapter 28 can cope with diversity between local authorities.

Agenda 21 gives little guidance as to how local communities should proceed with a Local Agenda 21 process. Chapter 28 does not offer a universal and general step-by-step guide for community involvement, and each community has to find its own most appropriate way. The general assumption is that local authorities can deal very effectively with public involvement because '*as the level of governance closest to the people, they play a vital role in educating, mobilising and responding to the public to promote sustainable development*' (para. 28.1, Agenda 21).

This chapter builds on observations and examples from the growing empirical literature on LA21. This literature documents experiences in local authorities

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(for instance Adolfsson, 2000, 2002; Andringa, 1998; Barrutia, Aguado, & Echebarria, 2007; Jonas, While, & Gibbs, 2004), in countries (Aal, 2001; Bjørnæs & Norland, 2002; Carter, Nunes Da Silva, & Magalhaes, 2000; Church & Young, 2001; Coenen, 1998a, 2001; Echebarria, Barrutia, & Aguado, 2004; Eckerberg, 2001; Eckerberg & Forsberg, 1998; Font, Gomila, & Subirats, 2001; Holm & Mabui, 2001; Kern, Koll, & Schophaus, 2004; Lustig & Weiland, 1998; Mullally, 2001; Narodoslawsky & Grabher, 2001; Niemi-Iilahti, 2001; Sancassinani, 2005) and cross-country (Are, 2005; Evans, Joas, Sundback, & Theobald, 2005, 2006; Kern & Löffelsend, 2004; Lafferty, 1999, 2001; Lafferty & Eckerberg, 1998; Norland, Bjørnæs, & Coenen, 2003; O'Riordan & Voisey, 1998).

Quantitative data in this chapter are taken from several cross-country comparative surveys (CSD, 2002; ICLEI, 2002; LASALA, 2001). The qualitative data concentrate on the experiences in a number of Western European countries where the effects on the ground of LA21 processes are becoming visible. These observations are especially based on the SUSCOM project.[1]

The main question we pose in this chapter is: *What impact does LA21, as a participatory reform, have on decision-making?* First we will define, in Section 10.2, what a Local Agenda 21 is about. In Section 10.3 we will discuss the aims of LA21 participation in terms of the functions participation is supposed to fulfil. Section 10.4 discusses the 'ideal' model of LA21 participation, in particular the timing of participation in the decision-making process, the number and nature of the participants involved, and how participation looks like in practice. In Section 10.5 we discuss the impact of LA21, in relation to this 'idealised LA21 participation', on the quality of decision-making. To explain the impact of LA21, as a participation reform, and the deviations in practice from the ideal format we focus in Section 10.5 on political, administrative and cultural differences between countries and communities, and differences between individual participants. In Section 10.6 we draw some conclusions.

10.2 Defining a LA21

Chapter 28 is addressed to 'local authorities' as one of the several 'major groups', that the Agenda singles out as particularly relevant for achieving the aims of the overall Agenda itself. It is because '*so many of the problems and solutions being addressed by Agenda 21 have their roots in local activities*', that the participation and involvement of local authorities is viewed as 'a determining factor' in fulfilling the objectives of the action plan. The second argument for the key role of local authorities is their position as the level of governance closest to the people (see earlier). Within this focus, we should concentrate on only the first of the four major 'objectives' in Chapter 28:

[1] SUSCOM is the abbreviation of a research project fully titled 'Sustainable Communities in Europe: A Cross-National Assessment of the Implementation of Agenda 21 at the Local Level of Governance'. The project was funded for 2 years as a 'concerted action' under the Programme for Climate and Environment by DGXII of the European Commission starting in December 1997.

> By 1996, most local authorities in each country should have undertaken a consultative process with their populations and achieved a consensus on 'a Local Agenda 21' for the community.

Chapter 28 of Agenda 21 is the shortest chapter in the 40 chapter action plan. Chapter 28 is a relatively simple appeal for a new era of dialogue and co-ordinated strategy for pursuing sustainable development at the local level. Agenda 21 gives little guidance on how local communities should proceed with a Local Agenda 21 process, in the sense that Chapter 28 does not offer an universal and general step-by-step guide. Each community has to find its own appropriate way, dealing with the specific geographic, demographic, economic, societal and cultural nature of the local community in question.

However, several international and regional organisations have played major roles in following up, and fleshing out, the documentary signals provided by Chapter 28. Among these, in Western Europe, the most important initiatives and organisations are the International Council on Local Environmental Initiatives (ICLEI), the European 'Sustainable Cities and Towns Campaign', and the so-called 'Aalborg Charter'. Using this Aalborg Charter and other initiatives, an LA21 can be defined as a local action plan for the achievement of sustainable development, which has to be worked out through a broad consultative process between local authorities, citizens, and relevant stakeholder groups; and eventually integrated with existing plans, priorities and programmes (compare Lafferty & Eckerberg, 1998).

10.3 The Ambitions of LA21 Participation

Participation is central to LA21 processes. Chapter 28 mandates local authorities to take responsibility for initiating and co-ordinating the dialogue among 'citizens, local organisations and private enterprises' which is necessary to determine the form and content of their specific LA21 initiative. This 'consultation' mandate is clearly meant to be a new and different process from existing public participation procedures. This effort to increase community involvement is one of the important criteria that distinguishes LA21 from earlier environmental policy-making initiatives (Lafferty & Eckerberg, 1998: 6–7). This dialogue among 'citizens, local organisations and private enterprises' determines the form and content of the specific LA21 initiative (Matthews, 1994; Morphet & Hams, 1994). There are no general guidelines in Chapter 28 to specify how the participatory process should look.

In Chapter 1 of this book, the different angles and motives for participation were discussed. In general, Chapter 8 of Agenda 21 deems wide participation in the development of national and local strategies to be necessary. Participation is considered necessary in sustainable development decision-making using both normative and functional arguments for participation. The normative perspective in Agenda 21 builds upon arguments for direct democracy stressing popular sovereignty and putting emphasis on direct involvement in substantive decision-making by the wider public. An LA21 aspires to 'share responsibility'. Of more importance than these normative arguments are the functional arguments, since Agenda 21 sees

public participation in the first place as instrumental. Many functional arguments for public participation found in the literature (Coenen, Huitema, & O'Toole, 1998) play a part in discussions on public participation in LA21. An LA21 should provide the possibility of articulating the interests of the various stakeholders. This is in line with the first type of functional argument, that without participation decisions taken will not be seen as legitimate because they will not reflect the will and the values of the people.

Secondly, public participation is functional because it contributes to the quality of decision-making. Firstly because participation gives local government the information necessary to make decisions. We can recognise this argument in the Aalborg Charter stage model. Extensive public consultation is coupled with a systematic identification of problems, and their causes, and the consideration and assessment of alternative strategic options. In this way information and experiences from all sectors of the community will be involved in the preparation process of local action plans.

Thirdly, an argument for public participation in Agenda 21 is its intrinsic value for the participants. This functional argument stresses that participation is essentially about empowerment or learning democratic skills. Through participation, people will learn of the problems that society faces, and how to interact with others that have different opinions or interests. This type of argument is emphasised in Agenda 21, formulated in terms of the intrinsic value that public participation has by contributing to the social emancipation of certain groups, especially women and youth.

As an interactive planning reform, Agenda 21 explicitly promotes a more communicative approach towards other actors in society (UNCED, 1992). It incorporates the idea that sustainable development is not possible without close co-operation with the community. To achieve this communicative approach, a stress is placed on participation in planning processes. This is in line with the communicative approach to planning and policy-making (see for example, Fischer & Forrester, 1993; Healy, 1992, 1993, 1996) In this approach, public involvement in planning is aimed at building consensus around appropriate actions and a sense of ownership of the goals of the plan. This is important because it means that third parties will plan their own decisions and actions to fit in with the intended government policy in the plan (Coenen, 1998b, 1998c).

10.4 The Shape of LA21-Participation and Decision-Making

What is the ideal model of LA21-participation and what does participation in practice look like? As mentioned earlier, several international initiatives following Rio, such as the ICLEI campaign, Sustainable Cities and Towns, and ANPAD defined steps or basic elements for an LA21 participation process using the term 'good practice'. We will apply the concept of participation rules discussed in Chapter 1 of this volume to describe the 'ideal' LA21 participation process based on 'general good practice' grounded in Chapter 28 itself and frequently used documents, manuals and guidelines, i.e.:

– What is the decision-making process about and who has the authority to put forward proposals ('authority rules')?
– Who is in the LA21 participation process ('boundary rules')?
– How is the information exchange organised ('information rules')?
– What is the mechanism for decision-making ('aggregation rules')?

Based on empirical data we will discuss LA21 participation processes in practice and deviations from the idealised model.

10.4.1 LA21 Participation and Policy-Making

The question as to what the decision-making process is about links to the different stages of decision-making. Early participation enables people to exert influence on the basic goals of decision-making and possible alternatives. LA21 participation can play a role in various decision-making stages such as (1) assessing needs and assets, (2) agreeing a vision, (3) generating ideas and plans for action, (4) enabling action, and (5) monitoring and evaluation (c.f. WHO, 1999). The Aalborg Charter, as a representative stage-model for good LA21 practice, clearly promotes participation in the early stages of the planning process. Early participation is important as it provides authority for actors to put forward proposals. When participants only become active at a late stage, alternatives are closed off and only minor changes to the proposed policy measures are possible given the money and time that has already been invested (see for example Connor, 1999). Early LA21 participation gives all stakeholders the capacity to make proposals and be involved in problem analysis and visionary aspects. LA21 participatory processes can involve not only very concrete and detailed proposals, but also decision-making on the policy underlying these proposals, and even longer term visionary and strategy processes. In Table 10.1 we distinguish five forms of LA21 participation process based on different ways of communicating between the local authority and the various stakeholders in local planning processes.

This results in five types of process that, in practice are labelled LA21 participation, but that live up to the idealised model of LA21 participation in different ways.

Non participation: In such a case what is called an LA21 is no more than an environmental plan developed within municipal departments and without any real form of serious consultation with the citizens.

Traditional consultation: Here, LA21 participation process takes the shape of a traditional planning process where the participants only enter when there is already a draft plan.

Semi-open LA21 pr ocess: In a semi-open process, several actors are consulted before drawing up the draft plan. The problem to be discussed is part of this discussion but the local authority selects the actors. In a semi-open LA21 process early involvement is restricted to a limited and invited group of citizens or organisations.

Table 10.1 Planning forms/LA21 processes at the local level (compare Seip & van Vliet, 1998)

Non-participation	Traditional	Semi-open	Open	Ideal LA21
Problem/goal	Problem/goal	Problem/goal	Problem	A community's contribution to sustainable development
↓	↓	↓	↓	↓
Development of plan	Development of plan	Development of plan	Facilitation process	Facilitation process
↓	↓	↓	↓	↓
Draft	Draft	Consultation with relevant actors	Stakeholders formulate problems, goals and solutions	Community formulates problems, goals and solutions
↓	↓	↓	↓	↓
Final plan	Public enquiry	Draft	Public debate	Public debate
	↓	↓	↓	↓
	Final plan	Public enquiry	Draft	Vision
		↓	↓	↓
		Final plan	Public enquiry	Public debate
			↓	↓
			Final plan	Draft LA21 plans
				↓
				Public consultation
				↓
				LA21

Open planning: In an open planning process, the local authority does not produce the first drafts of ideas and plans. They only facilitate a communication process in which any participant who would like to co-operate in defining the problem and the goal of the policy can make an input. In defining the problem, ideas and possible solutions will be discussed. The idea is that in an open planning process, participants do not react to ideas or plans from the local authority, but formulate problems and solutions themselves, which will then be incorporated in the draft plan.

Real LA21 participation process: The table shows only a small distinction between an open planning process and an LA21 process. In fact this is not so much a real difference, but more a change in accent. The main difference is that an LA21 is not only about a specific problem, but also about the very broad problem of a community's contribution to sustainable development. The initial formulations of problems, ideas and solutions will have more of a stress on a visionary process that will be discussed later. Further, an LA21 is an ongoing, open, planning process that does not end after formulating a single LA21.

In practice, LA21 participation processes can take very different paths. Worldwide 73% of all LA21 processes include stakeholder involvement, and in

Europe the figure is more than 75% (CSD, 2002; ICLEI, 1997).[2] This means of course, that a quarter of the processes can still be defined as non-participative. In a self-assessment, 49% of 134 surveyed LA21 coordinators said that there was active and representative community involvement in their LA21 process (LASALA, 2001). The worldwide survey shows that local governments are using a variety of methods to reach out to their communities and improve public participation. The most common participation methods are community meetings and information sessions, questionnaires, community workshops, and working groups (CSD, 2002).

10.4.2 The Participants Involved

Chapter 28 explicitly states that the whole local community should be actors in an LA21 process, including both typical citizens and major stakeholder groups. In practice, however, there are quit a lot of variations between LA21 processes. Although stakeholder groups are involved in the majority of Local Agenda 21 processes worldwide, under- or over-representation of certain groups presents a danger to the quality of decision-making. From the worldwide survey one can conclude that local government is the most important formal partner (60%), followed by individuals (57%), community groups (46%), NGOs (46%) and the business/private sector (42%). The groups least commonly recognised as formal partners include ethnic minorities and trade unions.

In practice, there are problems with meeting the ambition of broad participation. Firstly, the actual number of participants is rather limited. Even in the well-known case of The Hague, which had an extensive participation process only 400 citizens

[2] From November 2000 to December 2001, ICLEI undertook a global survey of Local Agenda 21 processes with the UN Secretariat for the World Summit on Sustainable Development, and in collaboration with the UN Development Programme Capacity 21. The *Local Agenda 21 Survey of Local A uthority Associations/Institutions* contained 15 questions and was directed to regional, national, and international institutions, including national governments and national municipal associations. Its primary purpose was to collect quantitative data on the extent of Local Agenda 21 initiatives on a country-by-country basis. The survey was initially distributed to 327 association contacts around the world. The association survey was also sent to the National Councils for Sustainable Development, the members of the UN Development Programme Environment and Resource Group, and hundreds of additional local government association contacts identified throughout the process. Altogether, 146 associations representing 105 countries responded to the association survey. Of these 92% indicated that they are involved in promoting Local Agenda 21 in some way.

The *Local Agenda 21 Survey of Local Authorities* contained 26 questions and was directed to local councils and authorities. Its purpose was to gather in-depth qualitative information about Local Agenda 21 processes. It was initially distributed to 2,000 local authority contacts worldwide. Additional distribution was conducted by ICLEI's regional offices and through the regional local government consultative meetings leading up to the Johannesburg Summit. Many other local government associations and organizations also assisted by distributing the survey to their members or posting it on the Internet. In total 633 local authorities, from 65 countries, submitted surveys. Of these, 89% met the specific criteria for LA21 and have therefore been included in the survey findings.

(less than 0.1%) participated (Andringa, 1998). Secondly, public involvement seldom represents a genuine cross-section of the community. This raises a potential of tension between participatory and representative democracy. Individual participants are often limited to an elite group who are used to participating in societal activities (Niemi-Ililahti, 2001). A typical critique from representative local politicians is that these 'gladiators' in LA21 processes come from narrow, unrepresentative, groups. The CSD (2002) highlights the need to continually encourage the explicit inclusion of particularly under-represented groups such as women, ethnic minorities, and youth.

In some countries, the lack of business involvement or the over-representation of environmental NGOs is an issue. A high level of NGO involvement raises the question of whom the NGOs actually represent. Some talk about 'green ghetto' participation, the dominance of existing environmental NGOs in LA21 processes (Young, 1998). In the UK there seems to be relatively many 'external forum' LA21s. In these LA21s the forum takes over the process. The 'LA21 forum' becomes a meeting place for drawing up alternative plans and policies based on anti-establishment (i.e. anti-Council) attitudes among local activists and NGOs. This model builds on an interpretation of LA21 as inherently a 'grassroots' idea; a vehicle for mobilising local populations against party politics, local bureaucrats and 'Big Business' (Lafferty & Coenen, 2001).

10.4.3 Information Exchange

Information rules refer to the extent to which citizens are offered free access to the information necessary to make decisions, and the degree to which they are offered assistance in obtaining it on the one hand, and on the other to the type of information that is considered crucial to the decision. In the Aalborg Charter it is stated that the signatories shall '*ensure that all citizens and interested groups have access to information and are able to participate in local decision-making processes*'. Further that they '*will seek opportunities for education and training for sustainability, not only for the general population, but for both elected representatives and officials in local government*'.

This suggests that possibly sensitive information should be widely available to citizens in an LA21 process. Environmental education is a major issue in Agenda 21 and, in this respect, LA21 processes are expected to offer generous assistance to citizens during the decision-making process.

In practice the information in possession of the population differs a lot among LA21 processes. For instance, in the Austrian Graz case, after 5 year of work, winning European awards and becoming a well-known case all over Europe, the general knowledge of the Graz population about its goals and measures remains sketchy (Narodoslawsky & Grabher, 2001). In contrast, in Sweden, both grassroots activities and local politicians involvement have been high and unchanged in the last years while education on Agenda 21 is frequent and therefore concepts are wide spread (Eckerberg, 2001; Eckerberg & Forsberg, 1998).

10.4.4 LA21 and Decision-Making

Concerning the mechanism for decision-making, LA21 participation strives for 'shared responsibility'. Shared responsibility requires a redefinition of the role of government and societal actors. Local Agenda 21 represents, at least, an attempt to extend the civil society at the expense of the role of the state. The role of local authorities changes from that of director to one of facilitator. Municipalities are not supposed to play a dominant role in LA21 environmental processes, but to be a facilitator and partner in an open dialogue. However, the appeal in Chapter 28 clearly expects a leading role for municipalities in organising the dialogue. This results in LA21 processes having to find their own way in regular decision-making processes. Without adequate and serious involvement by local authorities this will not work.

To avoid LA21 becoming an empty ritual, municipalities have to take steps to integrate LA21 processes into their municipal systems. The vast majority (94%) of local authorities (CSD, 2002) have reported that they are attempting to integrate sustainable development processes into the governance structure of their municipality. In these local authorities, LA21 processes are either operating in parallel to the municipal system (41%) or integrated into it (59%). According to the respondents, mechanisms used to integrate LA21 into the municipal system were:

- A process was in place to keep elected council members informed of the issues and initiatives (71%).
- One or more staff has training in sustainable development planning (67%).
- A process was in place to keep all departments involved in the Local Agenda 21 or Sustainable Development issues and initiatives (55%).
- The process supported a city-wide project(s) (55%).
- A process was in place to keep all departments informed of the Local Agenda 21 or Sustainable Development issues or initiatives (54%).

A second reason why LA21 could become an empty ritual is that municipalities are used to playing a dominant role in local environmental policy. In LA21 processes the municipality should play a role as facilitator and partner in open dialogue. Both the municipalities and other stakeholders have problems in getting used to the new role of municipalities in an LA21 process.

In practice, in some municipalities, LA21 processes have been started on the initiative of a non-governmental local group or a platform of groups. A worldwide survey (CSD, 2002) shows that although local authorities generally control the process and the budget, in a minority (40%) of the municipalities the local authorities are either not involved (1% of the total), provide only input (9%) or do not manage the budget (11%). Local governments, regardless of the GNP^2 of their country, do lead the process and are also the primary contributors in terms of paid staff and financial support. However, stakeholder groups share in LA21 decision-making to a much greater extent in the developing world (CSD).

10.4.5 The Impact of LA21 on the Quality of Decision-Making

The question as to whether LA21 participation improves the 'quality' of decision-making is not easy to answer. Inherently, in the idealised model of LA21 participation, there are elements that we can assume lead to a higher 'quality' of decision-making as conceptualised in this book:

- Any form of LA21-participation will give local government enhanced information useful for decision-making. The presumed high level of information giving and assistance to the public in LA21 processes will positively influence the decision-making quality. The explicit identification of the needs and wishes of the public can also contribute to better balanced proposals.
- Through their early participation in decision-making, at the stage of problem identification and visioning, the knowledge and experiences of all sectors of the community will be better used. This will improve systematic identification of problems and their causes, and also the consideration and assessment of alternative strategic options.
- True LA21 participation is functional from the perspective of efficiency. It will increase legitimacy of the decision-making process and reduce the level of conflict.

In practice, we see that public participation can provide useful data and information in the formulation of LA21 plans, as in the Albertslund case (see Chapter 6). However, aiming at extensive public participation, meaning that all sectors of the community should have a say in the decision-making process, presents many practical difficulties in decision-making. Keywords found are representativeness of the participants, and time and cost effectiveness.

In the first place, a bottom-up LA21 process depends very much upon the quality and power of the actors involved. NGOs and other actors need to be well organised to play a role in Local Agenda 21, and municipalities generally find it difficult to find equal and relevant partners for the dialogue (Coenen, 1998a).

Secondly, in the extensive and wide participation by citizens in LA21, it is stressed that *boundary rules* can have negative effects on decision quality that come down to the problem of representation. In the first place it is difficult to get specific groups such as business to involve. Secondly in general some groups, especially environmental NGOs, tend to be over-represented in the process. Thirdly there is the problem of representation in the sense whether citizens are representing themselves or specific groups in LA21 processes.

It is very doubtful that an exclusive authority of ordinary citizens to put forward proposals in the decision-making leads to a better quality of decision-making in LA21 processes. Practice shows that LA21 is often very much restricted to very local problems seemingly appealing for ordinary citizens like nuisance, littering and graffiti. Environmental effects in time (between generations) and space (North-South dimensions) can be totally lacking when the agenda is made by the citizens.

10.5 Explaining the Limited Impact of LA21 on Decision-Making

In this section we try to explain the many deviations from the 'idealised model' of LA21 as a participation process with mixed participation functions, pursued in an early stage of decision-making with broad participants' involvement. We develop our explanations under four categories:

- Tradition and experiences with stakeholder involvement
- National LA21 implementation
- Constitutional and institutional position of local authorities
- Constraints on stakeholder involvement

10.5.1 Tradition and Experiences

The worldwide LA21 survey shows differences in the presence and strength of stakeholder involvement between developing and developed countries. In the low GNP[3] category 86% of municipalities have formal stakeholder groups. In comparison, only 72% of municipalities in countries with a high GNP have stakeholder groups. However, while 73% of local authorities in the high GNP category manage the Local Agenda 21 process and budget, only 37% of local authorities in low-income countries play the same role.

Further, there are clear regional differences. For instance, in northern European countries there is a broader public involvement in procedures concerning environmental and planning acts than in most southern European countries. The Netherlands, Germany, the UK, and the Scandinavian countries, are among the foremost countries, while in countries such as France, Spain, Italy, and Ireland, there is relative less experience with citizens' participation. In France (Larrue, Emelianoff, Di Pietro, & Hèland, 2001) in terms of LA21 processes, public participation in the sense of early involvement by the general public was new and experimental. The local tradition of public participation limits public consultation to information processes. Partly because of this experimental character, French municipalities felt uncomfortable and hesitant over early public involvement. They would rather wait to face the public debate until plans have been formulated internally. Secondly, there is often a lack of capacity both in terms of means and in terms of knowledge. In Spain, public participation has only recently been included in the political agenda. The first municipal elections date back only to 1979 following the Franco-era (Font et al., 2001).

[3] The survey uses economically comparable groups by breaking the countries down into three GNP (Gross National Product) categories according to the World Bank classification US$755, US$756–9,265, and US$9,266 and above.

Experience with existing participation procedures can be either positive or negative (Coenen, van de Peppel, & Woltjer, 2000, 2001). Negative experiences with urban planning, such as with urban planning (Stadtentwicklungplanung, STEP) in Germany (Lustig & Weiland, 1998) or the traditional statutory planning consultation process in the UK, have frustrated many planners and made them hesitant about participation. If a country is well advanced in terms of public participation, the problem can also arise that LA21 is not seen as something new and worthwhile. For instance, in the Netherlands, LA21 was relabelled as a different form of political renewal or target-group environmental policy instead of as an appeal from Agenda 21 (Coenen, 1999).

10.5.2 National LA21 Implementation

The presence of a national campaign directed at LA21 promotion is crucial for the spread of such processes. The presence of a national campaign correlates directly with both high numbers of LA21 processes in a country and the extent of activity in such processes (CSD, 2002).

The way that LA21 is facilitated and stimulated at the national government level not only influences starting LA21 processes (Dahlgren & Eckerberg, 2005) but also influences the shape of local participation. In the Netherlands, LA21 was stimulated through a system of earmarked funding. The municipalities that choose to start LA21 process would receive funding under certain conditions. These conditions were set with guidance from the national Environmental Inspectorate, who controlled whether municipalities were delivering value for money. The emphasis was on concrete projects rather then strategic plans. As a consequence, LA21 participation took the form of citizen participation in activity agendas, programmes of very concrete projects (Coenen, 1999). In contrast, in the UK, with a lack of guidance and resources, many LA21 processes produced community visions that were in themselves useful and inspiring, but were unlikely to be funded or implemented.

10.5.3 Constitutional and Institutional Position of Local Authorities

Local authorities differ widely in their constitutional position (Hesse & Sharp, 1991), their position in planning (European Union, 1997) and urban environmental policy (European Union, 1994). For instance, in Ireland, the constitutional position of local authorities is very weak. In Ireland, because of this relative lack of experience, as a result of the heavily dependent relationship with national government, and the overload of recent local government innovations, the challenge of community consultation is seen as a barrier rather than as an opportunity for LA21 implementation (Mullaly, 2001). In contrast, in the UK, during the Thatcher and Major Conservative

governments, the autonomy of local authorities was so weakened that many of them saw LA21 as remaining opportunity for real autonomous policy.

The local authority is also very influential in terms of the representativeness of the participation, since they can decide which actors to involve in the process. For instance, in France, LA21 steering committees bring together representatives of central government, local authorities, associations, and experts, while inhabitants are not directly associated or represented in such committees (Larrue et al., 2001). In Spain, public participation is often limited to organisations explicitly invited by the municipality (Font et al., 2001). Local authorities can also influence representativeness through the way the participation process creates demands for the participants, in terms of time and the issues to be discussed.

Some local authorities take a paternalistic approach to LA21 (Lafferty and Coenen, 2001). They fear regressive input with respect to the environment and development agenda because there is no guarantee that increased citizen or stakeholder control will automatically result in greater sustainable development. For instance, Dutch LA21 practice shows that the major themes discussed in Dutch LA21s are on the 'here and now' and liveability rather than 'there and then' and sustainability (Coenen, 1999). The pioneering LA21 municipalities, although they have very different roots and motives, show the importance of the presence of certain 'firebrands' in the municipality. These firebrands may be interested and motivated civil servants, or interested local politicians, on the one hand, or an active and politically mobilised population on the other. There are also other institutional factors such as existing environment and development initiatives, and positive international contacts and networks, that seem to be advantageous to LA21 initiatives in general (Bulkeley et al., 2003; Coenen, Eckerberg, & Lafferty, 1999; Kern, Koll, & Schophaus, 2004; Kern & Löffelsend, 2004; Lafferty & Eckerberg, 1998).

10.5.4 Constraints on Stakeholder Involvement

The ambition of LA21 to realise broad public involvement can collide with the willingness and ability of these stakeholders to participate in practice. We know from political opportunity literature, in an analogy with gladiator spectacles in the classic era (Milbrath, 1965), that the group of gladiators who really battle in the LA21 process, by attending meetings, campaigning and fundraising, is small (Almond & Verba, 1965). Most citizens and stakeholder are apathetic. Their political role is passive and they have a general disinterest in local sustainable development and policies. Higher up the ladder of involvement we find a group that is minimally involved in the LA21 process. They constrain themselves to information seeking and discussing. A characteristic of many pioneering municipalities seems to be an active and politically-mobilised population. For instance, the well-known Danish pioneering Albertslund has the special precondition that, since the 1970s, it has attracted a particular kind of resident many of whom happen to be environmentally conscious, explaining the greater number of 'gladiators' in Albertslund (see Chapter 6).

For LA21 participation to work, there are general constraints on citizens and stakeholders. To participate, capacity is needed from the participant in terms of knowledge and time. To participate in the early stages of the planning process requires more than a single response to a draft plan. Constructively commenting on proposals demands a variety of 'skills', formulating alternatives and counter arguments even more so. The other side to this coin is that participants generally want real influence. A precondition for real influence is participation in an early stage of the decision-making process. Involvement will fall if LA21 proposals do not find their way into land-use plans and budgets, and community visions are not implemented in any way.

A complicating factor with LA21 is the type of policy process, i.e. thinking about the sustainable development agenda of one's own community, since this is demanding for participants. The reason for people to get involved is related to the discussed themes in LA21. It is easier to attract citizens to concrete discussions on the 'here and now' and liveability, than to involve them in the 'there and then' and discuss global and future problems (Coenen, 1998a). In the LA21s that are related to the Norwegian Sustainable lifestyle, a relationship with non-controversial and positive themes, and the potential level of conflict, has been shown (Aal, 2001). In the UK, many municipalities try to avoid the more difficult or innovative areas of sustainability (Church & Young, 2001).

Finally, a reason to get involved could lie in the participants' role in their community. In sustainable communities literature (Ward, 1998) it is often argued that geographic communities, with citizens participating directly in decision-making, should be a key factor for sustainable development because members share common interests and identities. Sharing common interests and identities has to do with community size and historical roots. In many of the studied countries, larger municipalities have taken the lead in LA21 implementation. This has probably to do with implementation capacity. In the Austrian study, LA21 pioneering communities are comparatively larger and urban, while in general Austrian communities are relatively small (Narodoslawsky & Grabher, 2001). In Finland, it was noted that, due to the large size of urban communities, inhabitants are unfamiliar with each other and have a lack of commitment to the community (Niemi-Ililahti, 2001). In France, however, some of the prominent pioneers are suburbs of large cities were one would expect a lack of historical community roots (Larrue et al., 2001). In contrast, in Spain, especially in the DEYNA initiative, the smallness of the municipalities has been said to make participation easier (Font et al., 2001).

10.6 Conclusions

In this chapter we formulated some characteristics of an idealised LA21 participation process. Theoretically, LA21 processes are highly meaningful participation processes. This means broad participation and early involvement in decision-making. We defined a real idealised LA21 participation model on the basis of elements or

steps that focus on the communication between the local authority and the different stakeholders. In practice, LA21 processes can lead to a range of participative practices from an open planning type of process to non-participation or empty rituals.

The question as to whether LA21 participation contributes to the 'quality' of decision-making is not an easy one to answer. Inherently, in the idealised model of LA21 participation, there are elements that we can presume lead to a higher 'quality' of decision-making as conceptualised in this book.

In our overview of LA21 implementation we recognise many of the known participation *limitations* discussed in Chapter 1:

- The representativeness of the participants is a problem, LA21 processes run the risk of being dominated by green NGOs and activists.
- The type of policy process, thinking about the sustainable development agenda of one's own community, is demanding for participants.
- LA21 suggests a new form of direct democracy while, in practice LA21, as every other form of open planning, is supplementary to representative democracy.

Since LA21 is a supra-national initiative, LA21 participation practices are an illustration of administrative, political and cultural differences that influence the shape that participation processes take. Some of these factors that influence the shape of LA21 participation cannot easily be manipulated, such as the weak constitutional position of local authorities in certain countries. Many factors however seem to be linked with tradition in, and experiences of participation. These factors suggest that countries and local authorities still have to grow towards new forms of participation. There can be a mismatch between the present-day participation practices in these countries and local authorities, and what is expected from real LA21 participation. For these countries and local authorities, there needs to be a process of learning to really participate.

References

Aal, C. (2001). Local Agenda 21 as means of interpreting and introducing the new policy issue of sustainable production and consumption – experiences from seven Norwegian municipalities. In W. M. Lafferty (Ed.), *Sustainable communities in Europe*. London: Earthscan.

Adolfsson, S. (2000). Local Agenda 21 in practice – a Swedish example. *Sustainable Development, 8*(4), 201–214.

Adolfsson, S. (2002). Local Agenda 21 in four Swedish municipalities: A tool towards sustainability? *Journal of Environmental Planning and Management, 45*(2), 219–244.

Almond, G.A. & Verba, S. (1965). *The Civic Culture: Politival Attitudes and Democracy in Five Nations*. Boston: Little, Brown & Co.

Andringa, J. (1998). The influence of Local Agenda 21 on local policy and the quality of decision-making: The pioneer city of The Hague. In F. Coenen, D. Huitema, & L. O'Toole (Eds.), *Participation and the quality of environmental decision-making*. Dordrecht, The Netherlands: Kluwer.

ARE (2005). *National promotion of Local Agenda 21 in Europe*. Switzerland: Federal Office for Spatial Development (ARE).

Barrutia, J. M., Aguado, I., & Echebarria, C. (2007). Networking for Local Agenda 21 implementation: Learning from experiences with Udaltalde and Udalsarea in the Basque autonomous community. *Geoforum, 38*, 33–48.

Bjørnæs, T. & Norland, H. T. (2002). Local Agenda 21: Pursuing sustainable development at the local level. In W. M. Lafferty, M. Nordskag, & H. A. Aakre (Eds.), *Realizing Rio in Norway. Evaluative studies of sustainable development*. Oslo: Prosus.

Bulkeley, H., Davies, A., Evans, B., Gibbs, D., Kern, K., & Theobald, K. (2003). Environmental governance and transnational municipal networks in Europe. *Journal of Environmental Policy and Planning, 5*(3), 235–254.

Carter, N., Nunes Da Silva, F., & Magalhaes, F. (2000). Local Agenda 21: Progress in Portugal. *European Urban and Regional Studies, 7*(2), 181–186.

Church, C. & Young, S. (2001). Local Agenda 21 in the UK – an overview – dissolving into the mainstream? In W. M. Lafferty (Ed.), *Sustainable communities in Eur ope*. London: Earthscan.

Coenen, F. (1998a). The Netherlands: Sudsidized seeds in fertile soil. In W. M. Lafferty & K. Eckerberg (Eds.), *From Earth Summit to Local Ag enda 21, working towar ds sustainable development*. London: Earthscan.

Coenen, F. (1998b). Participation in strategic green planning in the Netherlands. In F. Coenen, D. Huitema, & L. O'Toole (Eds.), *Participation and the quality of En vironmental decision making*. Dordrecht, The Netherlands: Kluwer.

Coenen, F. (1998c). Policy integration and public involvement in the local policy process. Lessons from local green planning in the Netherlands. *European Environment, 8*, 50–57.

Coenen, F. (1999). Probing the essence of LA21 as a value-added approach to sustainable development and local democracy; the case of the Netherlands. In W. M. Lafferty (Ed.), *Implementing LA21 in Europe: New initiatives for sustainable communities*. Oslo: ProSus.

Coenen, F., Huitema, D., & O'Toole, L. (Eds.) (1998). *Participation and the quality of environmental decision making*. Dordrecht, The Netherlands: Kluwer.

Coenen, F., Eckerberg, K., & Lafferty, W. M. (1999). The status of LA21 in Europe: A comparative overview. In W. M. Lafferty (Ed.), *Implementing LA21 in Europe: New initiatives for sustainable communities*. Oslo: ProSus.

Coenen, F., van de Peppel, R. A., & Woltjer, J. (2000). *'Inspraak'- an institutional and historical account of public participation in Dutch planning*. Paper prepared for World Planning Schools Congress, Shanghai, China.

Coenen, F., van de Peppel, R., & Woltjer, J. (2001). De evolutie van inspraak in de Nederlandse planning. *Beleidswetenschap, 14*(4), 313–332.

Commission on Sustainable Development (CSD) (2002). *Second Local Ag enda 21 surve y*. Background paper no. 15, submitted by the international council for local environmental initiatives, Department of Economic and Social Affairs, DESA/DSD/PC/BP15.

Connor, D. M. (1999). *Public participation in Western Europe: Current status and tr ends*. Paper presented at the 1999 IAIA Congress, Glasgow, UK.

Dahlgren, K. & Eckerberg, K. (2005). *LIP in central government perspective. In: Understanding LIP in conte xt – an e valuation of LIP in centr al go vernment, b usiness and compar ative perspectives in Sweden* . Report 5454 SEPA Ed. Stockholm: Swedish Environmental Protection Agency.

Echebarria, C., Barrutia, J. M., & Aguado, I. (2004). Local Agenda 21: Progress in Spain. *European Urban and Regional Studies, 11*(3), 273–281.

Eckerberg, K. (2001). Sweden: Problems and prospects at the leading edge of Local Agenda 21 implementation. In W. M. Lafferty (Ed.), *Sustainable communities in Eur ope*. London: Earthscan.

Eckerberg, K. & Forsberg, B. (1998). Implementing Agenda 21 in local government: The Swedish experience. *Local Environment, 3*, 335–349.

European Union (1994). *European sustainable cities project. First report*. Brussels: Expert group on the urban environment.

European Union (1997). *The EU compendium of spatial planning systems and policies*. Brussels: Regional Development Studies.

Evans, B., Joas, M., Sundback, S., & Theobald, K. (2005). *Governing sustainable cities*. London: Earthscan.

Evans, B., Joas, M., Sundback, S., & Theobald, K. (2006). Governing local sustainability. *Journal of Environmental Planning and Management, 49*(6), 849–867.

Font, N., Gomila, F., & Subirats, J. (2001). LA21: A question of institutional leadership? In W. M. Lafferty (Ed.), *Sustainable communities in Europe*. London: Earthscan.

Fischer, F. & Forrester, J. (Eds.) (1993). *The argumentative turn in policy analysis and planning*. Durham, NC: Duke University Press.

Healy, P. (1992). Planning through debate. *Town Planning Review, 63*, 143–162.

Healy, P. (1993). The communicative turn in planning theory. In F. Fischer & J. Forrester (Eds.), *The argumentative turn in policy analysis and planning*. Durham, NC: Duke University Press.

Healey, J. (1996). *Collaborative planning , shaping places in fr agmented societies* . London: Macmillan.

Hesse, J. J. & Sharpe, L. J. (1991). Local government in international perspective: Some comparative observations. In J. J. Hesse (Ed.), *Local go vernment and urban af fairs in international perspective*. Baden-Baden, Germany: Nomos.

Holm, J. & Mabui, M. (2001). The participatory and consensus-seeking approach of the Danish LA21. In W. M. Lafferty (Ed.), *Sustainable communities in Europe*. London: Earthscan.

ICLEI (International Council of Local Environmental Initiatives) (1997). *Local Agenda 21 survey: A study of responses by local authorities and their national and international associations to Agenda 21*. Available at website: http://www.iclei.org/la21/la21rep.htm

ICLEI (International Council of Local Environmental Initiatives) (2002). *Local go vernments response to Agenda 21*.

Jonas, A. E. G., While, A., & Gibbs, D. C. (2004). State modernisation and local strategic selectivity after Local Agenda 21: Evidence from three northern English localities. *Policy & Politics, 32*(2), 151–168.

Kern, K. & Löffelsend, T. (2004). Sustainable development in the Baltic Sea Region. Governance beyond the nation state. *Local Environment, 9*(5), 451–467.

Kern, K., Koll, C., & Schophaus, M. (2004). *Local Agenda 21 in Germany. An inter- and intra-national comparison*. Discussion paper for Wissenschaftszentrum Berlin für Sozialforschung (Social Science Research Center Berlin), Berlin.

Lafferty, W. M. (Ed.) (1999). *Implementing LA21 in Europe: New initiatives for sustainable communities*. Oslo: ProSus.

Lafferty, W. M. (2001). Introduction. In W. M. Lafferty (Ed.), *Sustainable communities in Europe*. London: Earthscan.

Lafferty, W. M. & Coenen, F. (2001). Conclusions and perspectives. In W. M. Lafferty (Ed.), *Sustainable communities in Europe*. London: Earthscan.

Lafferty, W. M. & Eckerberg, K. (1998). Comparative perspectives on evaluation and explanation. In K. Eckerberg & W. M. Lafferty (Eds.), *From the Earth Summit to Local Agenda 21 – working towards sustainable development*. London: Earthscan.

Lafferty, W. M. & Eckerberg, K. (Eds.) (1998). *From the Earth Summit to Local Ag enda 21: Working towards sustainable development*. London: Earthscan.

Lafferty, W. M., Eckerberg, K., & Coenen, F. (1999). The status of LA21 in Europe: A comparative overview. In W. M. Lafferty (Ed.), *Implementing LA21 in Europe: New initiatives for sustainable communities*. Oslo: ProSus.

Larrue, C., Emelianoff, C., Di Pietro, F., & Hèland, L. (2001). Local Agenda 21 in France: A new tool for sustainable policies? In W. M. Lafferty (Ed.), *Sustainable communities in Eur ope*. London: Earthscan.

Local authorities self assessment of Local Agenda 21 (LASALA) – Project team (2001). *Accelerating local sustainability – evaluating European Local Agenda 21 processes- Volume I and II*. Freiburg: ICLEI.

Lustig, S. H. & Weiland, U. (1998). Learning from past experience? Local Agenda 21 processes and integrated urban development planning in Germany. In F. Coenen, D. Huitema, & L. O'Toole (Eds.), *Participation and the quality of environmental decision-making*. Dordrecht, The Netherlands: Kluwer.

Matthews, N. (1994). Everything you ever wanted to know about Local Agenda 21 but were afraid to ask. *Town and Country Planning* 63.

Milbrath, L. W. (1965). *Political participation: How and why do people g et involved in politics?* Chicago, IL: Rand McNally.

Morphet, J. & Hams, T. (1994). Responding to Rio: A local authority approach. *Journal of environmental planning and management, 4*, 479–486.

Mullally, G. (2001). LA21 as a subordinate clause in discourses on the reform of local government and regional development in Ireland. In W. M. Lafferty (Ed.), *Sustainable communities in Europe*. London: Earthscan.

Narodoslawsky, M. & Grabher, A. (2001). From eco-social market economy to Local Agenda 21. In W. M. Lafferty (Ed.), *Sustainable communities in Europe*. London: Earthscan.

Norland, I. T., Bjørnæs, T., & Coenen, F. (2003). *Local Ag enda 21 in the Nor dic Countries - national strategies and local status*. Report 1/03. Oslo: ProSus.

Niemi-Iilahti, A. (2001). Public management in search of new implementation patterns: LA21 in Finland. In W. M. Lafferty (Ed.), *Sustainable communities in Europe*. London: Earthscan.

O'Riordan, T. & Voisey, H. (1998). *The transition to sustainability – the politics of Ag enda 21 in Europe*. London: Earthscan.

Sancassinani, W. (2005). Local Agenda 21 in Italy: An effective governance tool for facilitating local communities' participation and promoting capacity building for sustainability. *Local Environment, 10*(2) April, 189–200.

Seip, M. & van Vliet, R. (1998). Urban transport planning: A case of participative planning in the city of Groningen. Paper presented at the XII Aesop Congres July 22–25, Aveiro, Portugal.

UNCED (1992). *United Nations Conference on Environment and Development*. 3–14 June.

Ward, H. (1998). State, association and community in a sustainable, democratic polity. Towards a green associationalism. In F. Coenen, D. Huitema, & L. O'Tool (Eds.), *Participation and the quality of environmental decision-making*. Dordrecht, The Netherlands: Kluwer.

World Health Organization (WHO) (1999). Community participation in local health and sustainable development: A working document on approaches and techniques. *European Sustainable Development and Health Series: 4*, EUR/ICP/POLC 06 03 05D.

Young, S. (1998). The United Kingdom: A mirage beyond the participation hurdle? In W. M. Lafferty & K. Eckerberg (Eds.), *From the Earth Summit to Local Ag enda 21*. London: Earthscan.

Chapter 11
Conclusions

Frans Coenen

11.1 The Promises of Participation

In this volume we focus on the functional advantages for government of participatory processes for decision-making. These functional advantages are specific promises that participation holds. The key promise of participation in this volume is that it leads to better decisions. The main question this volume seeks to answer is *what limits and enables information in public participation to lead to better decisions* ?

All chapters in this volume either focus on the use of a particular participatory method in environmental decision-making or on a particular type of environmental related decision-making using participatory methods. The analyses are used as a basis for a review and assessment of the central theme: the relation between the limitations of participation arrangements and decision quality.

Participation processes are constituted and regulated by rules. These rules arrange content, participants, information flows, decision mechanism, etc. in a particular participation process. Through the use of particular rules, the participation arrangements will differ in terms of the organisational set-up, information sought from the participants, and the mechanism through which this information is processed. These all depend on the purpose that participation has in the eyes of the organiser. This purpose in itself depends on the underlying perspective the organiser has on the nature of participation. In the introduction chapter we related the purpose and nature of participation with decision quality. It is very difficult to establish an empirical link between participation and outcomes in terms of decision quality (Beierle, 2000; Beierle & Cayford, 2002; Chess, 2000). From a rational methodological standpoint a (quasi) experimental design is the best way to demonstrate that participation leads to decision quality. This would mean that from an experimental logic we would have to compare cases with participation (experiment group) and cases without participation (control group) on their decision quality outcome

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F.H.J.M. Coenen (ed.), *Public Participation and Better Environmental Decisions*,

(Beierle, 2000). Regardless of this outcome, in policy practice it will be extremely difficult to demonstrate that the effects found are due to public participation efforts and not other variables such as simultaneous events (e.g., local elections), the social context in which the activity takes place (e.g., the composition of the community and the history of controversy), and/or the nature of the environmental problem (Chess & Purcell, 1999). In an experimental logic we need to assume that participation processes can be divided into two groups: an experimental group where participation processes are present and a control group where no participation processes are present. In practice it will be difficult to find a clear difference between the experimental and the control group. It will also be difficult to find clear examples of non-participation (Meadowcroft, 2004). There is also a difference between normal rules for participation and rules actually applied as Huitema shows in his chapter concerning Canada and the UK (see also Huitema, 2002).

The examples in this book are cases where some organiser is allowing for participation. This is in contrast to processes of social negotiation (Gregory, McDaniels, & Fields, 2001) that aim for negotiated or voluntary agreements. Organisers in this volume are government organisations, but also for-profit and non-profit organisations that establish or manage public utilities such as waste treatment facilities.

In Chapter 1 we discussed the instrumental functions of public participation for government. In this instrumental perspective public participation potentially:

- Raises the substantive quality of the decision itself, by adding relevant knowledge to the decision-making process (like good ideas and (lay) expertise by participants)
- Adds to the quality of the analysis, by engaging participants in the assessment and monitoring of alternatives
- Will broaden public support for environmental related decisions which will lead to time gain (shorter decision-making processes in the long term) and co-implementation
- Will reduce the level of conflict and facilitate action and implementation

Table 11.1 refers to the contributions of the authors on the relation between purpose and quality. In the next three sections we link the potential improvements to the purposes of functional participation directed towards decision quality, labelled as:

- Better substantive decisions
- Better analysis and decision making
- Better decision implementation

11.2 Better Substantive Decisions

The chapters in this volume show that participation potentially adds information to a decision making process. But does this mean there will be better substantive decisions through the availability of more information (Beierle, 2002)? We assume that the organiser is interested in this information, and that he or she actively seeks

Table 11.1 The relation between the participation function and decision quality

Chapter	Method/type of decision making	Instrument function	Decisions improve through
Welp, Kasemir, and Jaeger	Integrated assessment focus groups in climate policy	– Use ordinary knowledge in assessment – Bring together scientific and ordinary knowledge – Helping decision makers and scientist to perceive and understand the perspectives of lay persons – Perform a reality check, testing the acceptance	– The use of ordinary knowledge – Insight of decision makers in the perspectives of lay persons – Insight of decision makers in acceptability of decision
Halfacre	Group concern focus groups in nuclear waste clean up	– To assess the concerns of particular groups in society whose voices are seldom heard within traditional methods – Raise legitimacy of decisions for traditionally under-represented in decision-making	– The high quality identification and understanding of concerns across the population
Flynn	Citizen jury/planning cells in waste treatment	– Structured and substantive engagement between 'ordinary citizens' and policy experts or other 'insiders' – Empowers 'ordinary' citizens to be more flexible in determining the scope and scale of the agenda for deliberation – Good means for ensuring reflexivity among policy-makers, by revealing how ordinary citizens view and respond to policy problems or choices	– 'Ordinary citizens' really part of the process – Existing policy network can learn ordinary citizens view and response to policy problems or choices – One can see how a given policy problem can be meaningfully deliberated
Oels	Future search conference in LA21	– Create a shared vision for the future of a community – Bring all relevant information on a topic under discussion without a superiority claim for scientific knowledge	– Using all relevant knowledge (without validity or superiority claim for a certain form – Confrontation of different opinions – Facilitate knew local knowledge
Coenen, Huitema, and Woltjer	Participation in sustainable consumption policy making	– Contributes to the systematic identification of problems and their causes, and the consideration and assessment of alternative strategic options	– A greater awareness by consumers of the environmental impact of their purchases and behaviour

(continued)

Table 11.1 (continued)

Chapter	Method/type of decision making	Instrument function	Decisions improve through
		– Identification of sustainable consumption options based on local knowledge – Increase the legitimacy of decisions concerning consumption patterns, and reduce the level of conflict. people will learn of the environmental problems that society faces (e.g. due to unsustainable consumption)	– Alternative sustainable consumption patterns – Generating consumer power to stimulate environmentally-friendly production choices
Huitema	Participation in waste facility siting	– Overcome negative community feelings, channeled through legal and extra-legal means (‘siting gridlock’) – Gaining acceptance from surrounding communities	– Reaching a decision – Acceptance of the decision
Doak	Participation in regional sustainable planning	– Build consensus amongst some of the key stakeholder interests in the region – Structure and guide the policy-making process	– Different types of information and knowledge drawn upon and utilised during the different stages of the process – Innovative and holistic negotiated outcomes of the process
Woltjer	Participation in infrastructure planning	– A better foundation for decisions using for local knowledge that would otherwise not be available in the process – React quicker and more precisely to the needs and desires of society – Improve public confidence in government save money and time in the long run, and provide information about	– The generation of support and good will – The generation of relevant knowledge – Through the gaining of good will save time and money and more control in the long term
Coenen	Participation in LA21	– Provide the possibility of articulating the interests of the various stakeholders – Gives local government the information necessary to make decisions	– Shared responsibility for sustainable development – Systematic identification of problems and their causes – Consensus about appropriate action

information. What can we conclude from the preceding contributions about the evidence that information by participation contributes to the quality of decision? For instance the new traffic plan for Groningen did include many of the ideas and contributions of participants and the results of the discussions. Public participation has provided useful data and more information in the formulation of the respective LA21 plans discussed in Chapters 5, 6, and 10.

Participants could raise or prioritise issues that otherwise would be overlooked in the decision making. In the waste management case described by Flynn for instance, the citizen jury raised several issues, such as policies on waste legislation implementation or waste transport that were novel concerns and have been largely forgotten about as the controversy centred on the health risks associated with incineration.

It is clear that participants hold information that would otherwise not be available. In the first place, there is local knowledge (Fisher, 2000). People living in a specific geographic area directly use public services, or pay social costs which means the ordinary public may have its own type of particular 'local' knowledge to bring into the process. The explicit identification of the needs and wishes of the public can also contribute to better-balanced proposals. Woltjers research among planners in practice shows that the need for information about the needs and desires of society is recognised in policy practice. The planners in practice take a very pragmatic look by using participatory strategies as a way to discover and consider alternative solutions founded in local knowledge that otherwise would be neglected. This strategy is especially desirable in projects with a high technical complexity where participatory decision-making strengthens knowledge and mobilises innovative ideas.

These needs and wishes need not be actual objective needs but are often subjective and can therefore not easily be calculated by experts. Halfacre's chapter makes the case that it is important to understand not only what people perceive but also how and why such perceptions arise. This applies especially to minorities or other groups whose perceptions could be easily overlooked. According to Halfacre, policy-makers must look beyond 'objective' characterisations of risk to understand the origin of minority perceptions about those risks.

It is clear that this 'local' knowledge has a value of it's own in the decision-making process. The contribution of Welp et al. discuss participatory, integrated assessments as a way to complement scientific knowledge by relevant ordinary knowledge impregnated by the norms, values, and interests of the participants. But there is a difference between explicitly relying only on ordinary knowledge and integrating these types of knowledge. Relying on scientific arguments alone entails the danger that certain dimensions of a problem, important for the public, will be missed. Welp et al. signal the opposite danger of 'populist decision-making', where expert knowledge is disregarded. For complex environmental problems this can lead to short-sighted decision-making leading to long-term problems.

Where Welp et al. analyse integrated assessment focus groups that bring ordinary and expert knowledge together; the Future Search Conference method described by Oels rejects a privileged role of experts and refuses to give scientific

knowledge claims any air of superiority. The lack of any scientific back-up led in the cases described by Oels to the problem that many innovative ideas generated in the process were ill-thought through ideas lacking meaningful details, ignoring financial considerations, and failing to identify clear cases on sustainable consumption. The chapter by Coenen et al. shows that better information in the sense of the inclusion of local knowledge and creative ideas does not, by definition, imply that this outcome is more sustainable or even environmentally friendly. Sustainable consumption issues often refer to long term impacts, and impacts for large, cross-boundary geographical areas. It requires consideration of the consumption possibilities for other world citizens (particularly in less-developed countries) and for future generations, to consume equally.

Balancing expert and ordinary knowledge goes in both directions. In the Alberstlund case described by Coenen et al., much information is available about the consequences of policies for sustainable development through the use of the environmental latitude concept for the public. Through the integrated assessment focus group method, decision-makers as well as researchers, perceive and understand the perspectives of lay-persons on climate issues.

Not all information given by participants in a public participation process has to be directed towards the actual decision. Participation is closely linked with the acceptance of a policy proposal. In a social-psychological sense it is about the attitude of participants towards a policy proposal. We don't want to discuss social-psychological dimensions of participation reactions in-depth, but conclude from these very basic social-psychological notes that participants can have very different reasons to react to a policy proposal. Participants react not only because they want to see an upcoming decision changed, but also to express their support or disapproval, which can sometimes be relatively loosely connected to the decision at stake. From basic socio-psychological notions it follows that the input could also serve very different goals such as expressing disapproval or support for a decision or just voicing frustration with the decision. In theory, decision makers should not be led by emotion or irrelevant information, or abandon normal decision-making rules because of these emotional reactions; they should not be diverted from an objective appraisal. In Huitema's Canadian case some examples are given of extreme emotional reactions such as 200–300 people invading the county office and opponents making constant calls to the office.

On the other hand, administration is not just looking for relevant information for the decision process, but also for support and legitimacy of the decision. Here we are particular interested in the information component of the public participation and the complementary process of the administration's use of this information.

At one end of the information exchange spectrum are one-way flows of information from the government to the public in forms such as public education campaigns, the provision of right-to-know information, and public notices. At the other end are one-sided flows of information from citizens to government, such as filing complaints.

Most examples in this book are two-way flows of information, either through traditional mechanisms such as public hearing (Checkoway, 1981; Fitzpatrick &

Sinclair, 2003) and citizen advisory committees or methods with a stronger focus on public deliberation such as citizen juries/panels (Crosby, 1995) or Consensus Conferences (Rowe, Marsh, & Frewer, 2004). In some of the cases, e.g., the traffic discussion in Groningen or the Australian water saving case (both described in Chapter 6) there is a strong element of providing information to the public through non-deliberative mechanisms, public notices, or public education. One could argue that a one-sided information flow from government to the public contributes to better decision implementation through information provision.

The question of how much this information exchange is one- or two-sided is often asked in a normative way. The communicative action theory of Jurgen Habermas (Habermas, 1984) plays an important role in this discussion. Communicative action theory states that talk can have the result of binding us to one another in a mutually-shared pursuit of understanding. In this view, the organisation that offers the possibility to participate should, on a basis of arguments and ideally in a situation without a misbalance in power, come to a common view and commitment with the participants leading to shared understanding and binding. This is a narrow view of communication; it excludes strategic communication geared towards selfish ends. It insists that speakers and listeners make them particular truth claims when pursuing communication oriented towards understanding. They must be sincere, factually correct, and have the normative authority to say what they are saying. Some methods rely on a Habermas type of free dialogue that will not be there in practice. As Flynn points out, some advocates of citizen juries hold a certain naivety about the modern policy process. Policy-making may not be open enough to accept or manage the inputs from citizen juries. Instead it will be a process where interests, issues, and ideas (rational or otherwise) collide with one another. Brute political power, institutional inertia, or interests may all count more than argument, persuasion, or rationality.

Does the input from the public add information that improves decisions? The type of information we seek is related to our perspective on decision-quality. The starting point is that public participation can be seen as a means to increase the quality of decision making. Public participation holds the promise that it will add extra information to the decision making process. The assumption is that participants hold specific knowledge that can increase the decision making quality. As a criterion for quality, we use here ‘competence’. In our operationalisation of competence worked out in Chapter 1, it relates to the use of information available at the moment of decision making. A ‘good’ decision does not neglect information available to certain groups in society. In other words, a decision is better if it considers the relevant views of other groups. Arguing for the use of all information available at the time of a decision, raises the question of how do we value information, and which type of information do citizens provide? Lindblom and Cohen (1979) make a distinction between scientific, ordinary, and interactive knowledge. Scientific knowledge owes its origin, testing, degree of verification, truth status, or currency to distinctive professional techniques. Ordinary knowledge owes its origin to common sense, casual empiricism, or thoughtful speculation and analysis. Finally, interactive knowledge is produced by participating actors during

the process; about the process as well as about other actors, their objectives, and related subjects. Although it cannot be known a priori which kind of actor possesses which type of information, it makes sense to assume that citizens are especially likely to inject ordinary knowledge into decision-making and that this kind of (often context-specific) knowledge can be a very helpful addition to increase decision quality.

Beierle (2000) notes that "there is a tendency to assume that the citizens participating in environmental policy decisions are laypeople rather than experts. Yet the capacity that participants bring to the table can often be quite impressive…". In the 239 case studies he reviewed, he observes that

> [I]n roughly 40% of the cases for which data…[was] available, there was a significant level of technical capacity among most of the participants. In another roughly 45%, there were at least some participants with significant technical capacity who could act as internal technical resources for the rest of the group. In the remaining cases, participants had little overt technical or issue-related expertise. It is only to this last 15% that the label 'lay public' most appropriately applies (Beierle, 2000, Appendix 3: 16).

The expertise level expected from participants depends on the type of participation process and the knowledge need for this process. As Coenen points out, a bottom-up LA21 process depends very much on the quality and power of the actors involved. NGOs and other actors need to be well organised to play a role in Local Agenda 21, and municipalities generally find it difficult to find equal and relevant partners for the dialogue. To participate in the early stages of the planning process requires more than a single response to a draft plan. Constructively commenting on proposals demands a variety of 'skills', formulating alternatives, and counter arguments even more so. The effect of a lack of help in collecting and processing information on the citizens is that they are significantly handicapped during the entire process, unless they happen to have experts in their midst.

Welp et al. address the problem of ordinary knowledge versus expert knowledge as basically the contradiction between two ways of decision-making: populist and technocratic. The cases in this book show very different models of dealing with expert knowledge:

- Participants are considered as experts in their own right
- A rejection of expert input
- Integration of expert knowledge and ordinary knowledge

Welp et al. argue that the role of science and expert knowledge is changing. Major uncertainties, both in the science and the politics of environmental issues, mean that expert knowledge cannot provide a complete and incontestable description of the issues. Rather than offering clear and compelling advice to determine policy, such expert knowledge becomes only a part of a broader process of social learning.

In Future Search Conferences the idea of the privileged role of experts is rejected. The knowledge provided by experts is no longer automatically regarded superior to other ways of knowing. By bringing together a carefully selected spectrum of stakeholders to an issue, the Future Search Conference instead aims to bring the relevant information on the topic under discussion into the room and make it available to all

stakeholder groups as a basis for decision-making and action planning The Future Search Conference method encourages participants to draw on multiple ways of making validity claims, thereby refusing to give scientific knowledge claims.

The opinion of citizens is placed above expert knowledge in the NOP case described in Chapter 6. The USDA suggests that the will of the people should set aside the authority of scientific discourse. The argument for prohibition is not scientific. In fact the USDA states that there is no scientific evidence that the use of the excluded methods presents unacceptable risks to the environment.

Different types of information and knowledge are drawn upon and utilised during the different stages in a decision process. For instance in the siting cases described by Huitema, any citizen has access to the process during the consultation and inquiry stage of the process; citizens can listen to information and talk back. In the following stages they have much less participatory influence. In the regional planning process described by Doak, the Sustainability Panel facilitated the input of a selective range of mostly expert stakeholder groups in the first stage. A wider range of stakeholder perspectives due was addressed more fully during the public consultation stage when a much broader range of local and sub-regional interests became involved in focussed workshops, written responses, and locally-based events. In the Public Examination and subsequent report, business interests supported their competitive interest using research and information from planning and economic consultants.

11.3 Quality of Assessment

A second aspect of the functional advantaged of participation is that the involvement of the public raises the quality of assessment of alternatives. This presumed advantage has to be placed against the background of our perspective on decision-quality, which argues that all information available at the time of decision should be used when decisions are made.

The thesis is that better decision-making through the involvement of participants leads to better analysis and better assessment of alternatives in the decision making process.

That there are different views on this assessment is perfectly illustrated by the following citation from the Science Advisory Board Commentary of the US Environmental Protection Agency (EPA). The commission states[1]:

Basing decisions on a careful consideration of all available science is a basic part of the EPA's mission. However, in the press of day-to-day operation even the Agency may be diverted from this mission. For obvious and legitimate political reasons, the Agency is interested in minimizing controversy. Especially in

[1] Appendix A – "Science Advisory Board Commentary on the Role of Science in 'New Approaches' to Environmental Decision-making that Focuses on Stakeholder Involvement," EPA-SAB-EC-COM-00-002, October 7, 1999.

newer decision environments, which involve a greater focus on consultation and negotiation among directly involved stakeholders, there is a risk that the broad public interest in assuring that decisions are based on a full consideration of all available science may receive too little attention.

A distinction is often made in literature between 'simple' consultation methods and methods that involve randomly selected groups with a direct impact on high level decision making, innovative methods like citizen juries, deliberative polling, and citizen panels. We believe that different methods provide different forms of information which are all valuable. Simple consultation methods such as hearings and public surveys often involve larger groups of the population, but this does not mean that these lager groups are representative. A second important distinction in addition to the representation of the participants from random selection is the attempt to make these randomly selected participants more knowledgeable on the issue up for participation so they can give a more informed opinion. The problem with the simple consultation methods is that this ordinary opinion from, for instance opinion polls or public hearings, only provides snapshots of relatively uninformed public views, not what people might think if they were allowed to deliberate. Deliberation raises the quality because participants from the general public are chosen in a way as representative groups of citizens through some appropriate random process (which excludes interested parties) and are given the time and resources to understand an issue before they are asked for advice. Experiences with the development and use of such methods in both the United States and Europe demonstrate that, given adequate time and resources, lay groups can perform extremely well in such advisory capacities (Crosby, 1995). In contrast, in Future Search Conferences educational inputs during the conference days are strongly discouraged as participants would feel less inclined to draw on their own resourcefulness.

Public participation can not only add to the quality of the analysis by engaging participants in the assessment and monitoring of alternatives, but also because of the interaction between participants who can learn from each other. In the first place, there is the confrontation between expert or 'insider' knowledge and ordinary knowledge. The chief argument that Flynn presents in his chapter on citizen juries is that they achieve a type of deliberation over policy options which is valuable because it forces engagement between the views, values, and information of ordinary citizens with those of policy experts or other 'insiders'. The hope is that experts realise there may be more views to the problem than just their own and a more genuine engagement between experts and citizens is achieved.

In her chapter, Halfacre alludes to the fact that the interaction between participants in focus groups illuminates the logic and assumptions of the respondents; interaction allows individuals time to rethink positions, arguments, and opinions. According to Halfacre, participants would agree with other participants' statements, or even rethink their own and other's arguments many times in the focus groups analysed in her chapter. Oels also reports from her Future Search Conferences that participants reported that they had learned a lot from each other over the course of the event.

Welp et al. in their chapter on integrated assessment focus groups argue that dialogues between the scientific community and the extended peer community, be it ordinary citizen or stakeholders with an interest in a specific problem or issue, provide a setting for mutual learning.

11.4 Better Decision Implementation

The chapters also give some proof that participation contributes to better or easier implementation. Better implementation can be interpreted as the avoidance of implementation problems. Implementation problems can arise from a lack of information. Implementation problems lie in time delay, costs, and conflict. They can follow from a lack of legitimacy of a specific decision or a general lack of trust in the organisation that makes the contested decision. Woltjer illustrates that in practice planners view participation as one of the means to save time and money in implementation. Participatory decision-making should lead to more control over the planning process and its outcome.

A general condition for successful implementation is building trust among policy target groups and gaining cooperation from co-implementing actors. Non participatory procedures could lead to conflict and a lack of legitimate decisions; particular siting decisions. In an American context, easier implementation can mean avoiding lawsuits. The absence of citizen input can hinder the implementation of laws and subsequently, can produce increased litigation over agency decisions such as the location of dangerous installations. Huitema shows that if negative community feelings are not overcome through participation, these feelings will be channelled through legal procedures and sometimes through extra-legal means (‘siting gridlock’).

But building trust and legitimacy is not only important for single issue or siting decisions. Including the views of citizens is also important for sustainable policies, which can only be effective and successful when accepted by the majority of affected people. This is particularly important if stakeholders are co-implementers or when behaviour change is expected from stakeholders. The participants not only include public parties, but also a variety of private actors that have the resources and means of power that can be decisive for the success of policies and plans. Especially a ‘sense of ownership’ of a plan or project can ease implementation. Methods can have a specific meaning for building trust. Flynn notes that more generally, distrust by many citizens of the modern policy process is also cited as a reason for citizen juries, along with the belief that decision-making is increasingly beyond their control or comprehension.

Building trust is not only important between stakeholders and government but among stakeholders themselves. Oels reports that Future Conference participants gave many examples of collaborative endeavours that had become possible as a result of these new or revived contacts during the conferences. If a conference climate is conducive to establishing rapport and trust between participants,

lasting networks are formed. Participants reported that their willingness to make a contribution to the local community had increased as a result of connecting with such a large number of people who seemed to care deeply about its future.

Some cases in the book show actual implementation success due to participation. In the traffic case described by Coenen et al., an indicator of the support gained through the participatory preparation of the traffic plan, the official public enquiry procedure after the plan was relatively short and no major adjustments were made. In the water consumption case in the same chapter, market research indicated very high levels of support (over 90%) for the overall directions of the water strategy after the participation process.

11.5 Limitations of the Instrumental Function of Participation

Many limitations of participation are discussed in the literature. Typical limitations mentioned are that participants are incompetent, only interested in their own personal interest, and not representative of the wider population. Participation processes would undermine existing (democratic) decision structures, be dominated by prevailing stakeholders, increase the probability of a conflict, and cost time and money.

Much of the discussions on limitations of participation are discussions on the limitations of specific participation methods. The methods described in the following table (Table 11.2) and discussed in the book all have in common that each raises objections against more traditional public hearing and public comment methods (e.g., public hearings or surveys). Typical limitations of these traditional methods mentioned would be:

1. The information gained through these methods is limited.
2. The information exchange is one sided.
3. Participants don't feel they are in a secure environment to express their ideas.
4. Participants have little control over the agenda for information exchange.
5. There is a bias towards certain opinions, either because certain interests are not present or through the dominance of certain interest in these traditional methods.

Here we are interested in what limits and what enables the instrumental function of participation to support better decisions through information. *What limits and what enables information in public participation to lead to better decisions*? Limitations of the contribution of public participation to effective decision-making through information lie in the organisational set-up of the participation process, the type of information sought from the participants, and the mechanism through which this information is processed.

We can ask about limitations for all three instrumental functions.

What limits and what enables public participation to raise the substantive quality of the decision by adding relevant knowledge to the decision-making process? In Section 11.6 we discuss examples of limitations in getting the correct substantive

Table 11.2 Strengths and weaknesses of the participation methods discussed (Abelson et al., 2003; Creighton, Priscoli, & Dunning, 1998; Halvorsen, 2001, 2003; IAP, 2003; Innes, 1999; Lawrence & Deagen, 2001; Petts & Leach, 2000; Rowe, 2000; Rowe & Frewer, 2005)

		Future Search Conferences	Planning cells/ Citizen juries	Focus groups	Public hearing
Additional source of ideas and information	Strengths	– Obtaining informed opinions from laypersons	– The small size of individual cells and its non-intimidating nature allows for innovative ideas and active participation – The approach creates informed, active, engaged citizenry. – Provides opportunities to introduce new perspectives and challenge existing ones.	– Good way to learn about the needs or opinions of a particular group	– It has the potential for improving decision-making and informing citizens.
	Weakness	– The process may set expectations that public bodies are unable to meet	– It is difficult to keep bias out of the information dissemination process.	– Risk that ideas expressed are influenced/ shaped by interactions with (dominant) participants	– Special interest groups may dominate the hearings which biases feedback
Adding to the quality of the analysis	Strengths	– Visioning emphasizes consensus building, collaboration and cooperation	– Encourages more careful examination of the issue. – Participants represent all citizens and not special interest groups. – All members of the population have an equal chance to be a part of this process.		
	Weakness		– The authority defines the problems. – Only useful for problems in need of unique decisions.	– Selection criteria and limited number of representatives can bias opinions. – Lack of informed participants produces superficial discussion	

(continued)

Table 11.2 (continued)

		Future Search Conferences	Planning cells/ Citizen juries	Focus groups	Public hearing
Adding to implementation (Broadening of public support, reducing the level of conflict)	Strengths	– Fosters connections /partnerships between different organization; a strong educative role.	– The process contributes to public trust in democracy because of the emphasis on making decision-makers more accountable. – Resulting decisions are frequently implemented.	– Informal, discussion of issues in a relaxed atmosphere can often lead to consensus and feeling of enrichment among participants	– If the hearings are transparent, presenting an "expert voice" may minimize conflict.
	Weakness	– Contrary visions may be irreconcilable.	Decisions are not always feasible	– Potential for revealing and reinforcing social divisions	– Often late in the process – The process does not generate a sense of ownership

(representative and unbiased) information and limitations in making sure that the information is used so that it is really added to the decision-making process.

What limits and what enables public participation to add to the quality of the analysis, by enga ging participants in the assessment and monitoring of alternatives? In Section 11.7 we discuss examples of limitations in necessary resources, the type of decisions involved, and the right environment for the assessment.

What limits and what enables public participation to br oaden public support, reduce the level of conflict and facilitate action and implementation ? In Section 11.8 we discuss examples in this book of limitations that arise from a lack of trust and commitment.

11.6 Limitations in Using Participants Information

The first instrumental purpose of participation we distinguish is raising the substantive quality of the decisions by adding relevant knowledge to the decision-making process. What limits public participation to raise the substantive quality of the decision by adding relevant knowledge to the decision-making process? We discuss here limitations in getting the right substantive (representative and unbiased) information and limitations in getting the information used so that it is really added to the decision-making process.

11.6.1 Getting the Right Information

A general concern with participation is that participants are not representative of the wider population, and the information they produce depends on the views, goals and insights of these particular participants. Whether this non representation forms a problem depends on what one expects from the participation process. For generating innovative ideas or adding local knowledge, the participants don't have to be representative, although one would have to realise that the information is potentially biased. It can also be the case that one explicitly wants to hear the voice of a certain group. Halfacre's example discusses the possibility of focus groups to target traditionally under-represented groups including minorities and lower income individuals who have historically had a limited or no voice at all, in the political process. But these focus groups can also target citizens that are 'disproportionately effected' by certain decisions; often minorities and low income groups.

For getting information, views, and needs, governments have traditionally relied either on focus groups, public advisory committees, or opinion polls. These traditional public comments methods are limited due to technical problems. Halfacre points out that these traditional methods clearly discriminate against the participation of certain groups. Telephone surveys for instance, have low minority response rates and are hindered by an absence of phones in many low-income households.

No matter how representative the citizens' input in all three methods may be, only a small number of citizens really contribute. The use of new communications technologies in public involvement in policy-making, often referred to as digital government, can change this dramatically as shown in the example of the input by consumers in national policy-making described by Coenen et al. Only a small number of citizens could be reached without these new information technologies. If the issue at stake occurs in a geographically small area, traditional methods reach a larger share of the population. Only a very limited number of citizens would be directly involved in national policy-making, notwithstanding how representative of the whole population this number would be.

In some of the other cases, even if the participants are not representative of the wider population, the share number of participants is sometimes impressive. Huitema mentions in the UK siting case 35,000 signatures against the BFES proposal. These 35,000 signatures are still nowhere near half of the population; and the reactions came mainly from people living near the proposed site. In the organic rule proposal described by Coenen et al. more than a quarter of a million reactions were received, but this is still only a fraction of the US population. Larger numbers can also exclude certain groups. In the Groningen mobility case described in the same chapter the municipality received nearly 10,000 suggestions on how to deal with the traffic problems from about 6,000 respondents. The respondents were biased towards membership of organised interest groups and higher educated citizens. Only about 20% of the participants in the open planning process were from out of town; most commuters and visitors did not participate.

Bias and potentially manipulation can be caused by how the process is organised and the methodological limitations of the participation methods used.

Sometimes the problem lies in the method itself. Even if the participation process starts with a group of citizens representative of the wider population, as Flynn points out, in citizen juries these 'ordinary citizens' are transformed from passive into active participants in the policy process. They are no longer a faithful representative set of what Flynn calls sometimes 'rationally ignorant/indifferent' voters and consumers. In his opinion all we can then learn from a citizen jury is how ordinary citizens might respond if a wider policy debate utilises certain types of evidence, arguments, and persuasion akin to a citizen jury. As a result the jury verdict of citizens in the end may not relate to those of a wider electorate, who wouldn't have the benefit of several days of carefully managed deliberation.

Some participation methods are not meant to be representative at all. As Oels analysis shows, access to the Future Search Conference is always highly restricted. Participants are selected from a range of those affected by the outcomes, those with information on the local key issues, and those with resources to facilitate action. There was no process by which a sector could nominate their own candidates or by which those who felt they would be affected by the outcomes were given a right to participate. In the Future Search Conferences studied, a local elite of committed people was gathered, but they failed to attract a cross-section of 'ordinary' citizens. This bias is implied in the Future Search guidance which emphasises the importance of getting the local 'movers and shakers' into the conference room – in

addition to the citizens. In one of the case studies, the business sector and young people were under-represented at the conference.

But whether under – or over-representation of certain groups presents a danger to the quality of decision-making, depends on the function of participation. As pointed out in the chapters on LA21 the function of participation was to involve as many citizens as possible in direct interaction. If in practice individual LA21 participants are limited to an elite group used to participating in societal activities, this function is threatened. Some methods claim that it offers a solution for the problem that specific interest groups dominate the process (Hendriks, 2002). Flynn argues that citizen juries may be a viable way of guarding against this and ensuring that special interest groups are not engaged excessively.

How representative the information is, is not only influenced by the chosen method but also by the institutional arrangements and how the process is organised (Peelle, Schweitzer, Munro, Carnes, & Wolfe, 1996). How the process is organised determines who is in the process and the decision-making phase that the participants are involved in. An example is the dominance of existing environmental NGOs in LA21 processes in the so-called 'external forum' LA21s. In these LA21s the forum takes over the process. The 'LA21 forum' becomes a meeting place for drawing up alternative plans and policies based on anti-establishment (i.e., anti-Council) attitudes among local activists and NGOs. The problem is that other groups such as business are clearly under-represented.

These examples show that early involvement is often restricted to a limited and invited group of citizens or organisations. The local authority is also very influential in LA21s in terms of the representativeness of the participation, since they can decide which actors to involve in the process. Doak shows in his chapter the differences between the phases in the process. Certain stakeholders dominated certain phases, particularly business interests (or their hired planning consultants). The decision of the Panel to use SERPLAN as a surrogate or representative for the local authorities of the region also meant that SERPLAN was often left without the 'usual' wall of local authority support to help them argue the case against business organisations objecting to the submitted strategy.

Some form of manipulation in the participation process is always possible. Huitema describes the attempts to influence the community by approaching certain local leaders, selected on the basis of 'power structure analyses', to become active local proponents of the facility. Flynn mentions that experts in the citizens' juries process may subtly influence the views and opinions of the jurors. An interesting aspect of the NOP rule case is the role of the media. The media can focus on certain opinions, scientists for instance, and give less attention to others such as business interests.

Welp et al. mention that there is a potential risk of manipulation of IA Focus Groups. For example, if the method is adapted to include broader policy advice, the moderator can to some extent, have an impact on the discussions and outcomes by selecting certain information to be presented and by choosing certain models. They think that the possibility of abusing the method must be taken into account. Rather than using this as a reason for not applying the method, careful application is needed.

11.6.2 The Information in Decision-Making

Getting the right information is only one factor that potentially hinders the instrumental function of participation to improve the substantive quality of decisions by adding information. Information has to be used so that it is really added to the decision-making process.

There is a difference between using information and changing the decision. In line with the criterion of competence when talking about effective participation, the question is not if the information from the participation changed the decision, but whether the information from the participation process is used and plays a role in the decision-making process. In many cases there is no major decisive role for the outcome of the participation in terms of decision outcomes.

An example of non-use is offered by Flynn. This citizen jury report was circulated to all elected members of the two local governments, planning staff of the local governments, and all the local media. However, a response from the elected representatives was almost entirely absent, and that from the local governments' environmental policy staff was minimal. In fact no formal feedback was offered and the findings were simply left to one side as the fruits of a limited and experimental jury seen as a pilot type approach.

The question is how much the participation process is institutionalised and related to the actual decision-making process. Problems lie in the built-in mechanism of transferring outcomes to the political decision-making process in the participation methods and the institutional arrangements around the use of the information from the participation process. The difficult problem with the institutionalisation for the participation process in the actual decision-making is the tension between participatory and representative democracy (Lafferty & Meadowcroft, 1996) The other side of the coin is management of the expectations that the participants hold about decision influence.

Several of the methods (IA Focus groups, citizen juries, future conferences) have no clear integral mechanism of transferring outcomes to the political decision-making process. Instead, it is a case-by-case decision whether the outcome reaches political decision-making. Sometimes the organiser of the participation voluntarily commits himself to using the outcomes of the participation process. Flynn reports on citizen juries that although the jury outcome is almost never legally binding for decision-makers, authorities usually agree to honour some of its findings. Huitema describes in his Canadian case the addition of a local veto to the normal decision procedures. How and by whom such a local veto should be exercised was not clear, but the intention was that in the event of local opposition, the facility would be located elsewhere. These institutional arrangements could be described as a voluntary binding referendum.

If there is no integrated mechanism to transfer the results of the participation process into some form of voluntary binding agreement by the organiser, there are other ways to raise the issues that established policy actors will use the participation outcomes.

One arrangement is that some politicians become directly involved in the participation process, such as in the Future Search Conferences. Another involves policy insiders with connections to conventional policy networks, such as Flynn's proposition for effective citizen juries.

If there is no built-in mechanism to transfer the outcomes from the participation process into the decision-making than the participation process runs the risk of being disembodied from the actual decision-making context or even being seen as a 'rival' process. For instance, LA21 proposals do not find their way into land-use plans and budgets, and community visions are not implemented in any way.

Oels talks about a double institutional problem in dealing with Future Search Conferences and the LA21 process. This problem is caused because LA21 processes in general tend to have weak links with Council decision-making, and Future Search Conferences have a weak link with the rest of the LA21 process.

Another problem is the level of government where formal decision-making takes place. In many issues the decision power is not found with the government that organises the participation but lies in the hands of a higher institution, for instance national or European level government. As Coenen points out, this is particular a problem in LA21s as the constitutional position of local authorities is very weak and/or the municipalities in LA21 processes are very small.

Limitations also lie in the decision power of the organisation that arranges the public participation. Participation only influences a part of the whole constellation of decision-making. A participatory phase in the whole decision-making process can't turn the whole constellation upside down. For instance, in siting decisions, power lies in the hands of the private companies, especially the site selection and the choice of technology. The local authority must decide on the acceptability of the proposal but is strongly checked by central government and thus does not have space to decide on the basis of local considerations. The participation process is embedded in these existing rules. The two cases described by Huitema show an interesting difference. The Canadian siting process in Swan Hills was not written down in law, but slowly emerged from the work of various advisory committees and temporarily set aside the Canadian rules, whereas in the UK case the 'normal' decision rules continued to apply.

Participatory decision-making in sustainable consumption policies is limited without the government power to carry out final decisions. Many decisions in the field of sustainable consumption are private, and only when the government has some form of responsibility over these decisions can they be subject to indirect participation.

This disembodiment also has to do with the acceptance of the participation method. Welp et al. mention that the contribution of IA Focus Groups to better decision-making not only depends on how decision-makers are involved in the process and informed about the outcomes, but if they are aware of the benefits of the IA Focus Group method. In Oels case Olching, the fact that only 5 out of 30 councillors were invited led to open hostility by the majority of councillors towards the Future Search Conference project. The acceptance can also be a matter of culture and experiences with participation in the past, such as how different LA21 implementation is in different countries.

This acceptance relates to by whom and why participation is introduced in the decision-making process. This does not have to be initiated by the organiser of the participation. If a law, an international treaty, or donor organisation obliges some form of participation in the process, this it does not mean that practice in a certain country or organisation will be ready for these ideas.

Tension between participatory and representative democracy is another aspect of the acceptance of the outcomes of the participation process in the decision-making because participants want real influence. Participants want to believe that their input will have consequences in decision-making. On the other hand, civil servants and politicians do not always have high expectations of the value of participants' input. The Groningen example is a typical illustration of the tension between participatory decision-making and representative democracy. Citizens expect real influence in decision-making, and then find out that it is the responsibility of elected politicians. In the organic food case many commentaries raised questions about the influence of the NSOB board on the first proposed rule. In the end the overwhelming opposition had real influence on the final outcome. Formally, the final decision was taken by means of representative democracy. In practice, representative democracy gave in to direct democracy because of the overwhelming opposition to the proposed rule.

11.7 Limitations of Participation to Add to the Quality of Assessment

The second instrumental purpose of participation we distinguish is that public participation potentially adds to the quality of the analysis by engaging participants in the assessment and monitoring of alternatives. What limits and enables public participation to add to the quality of the analysis by engaging participants in the assessment and monitoring of alternatives? In this section we discuss examples in this book of limitations in necessary resources, the type of decisions involved, and the right environment for the assessment.

11.7.1 Resources

One of the limitations to the improvement of the quality of analysis by engaging participants are the resources necessary for the assessment and monitoring of alternatives both from the organisers' side and from the participants' side. Organising a participation process leads to costs compared with decision-making without participation. But if participation is legally prescribed these costs can not be avoided. Modern IT-methods can save money on legal requests. For instance, the electronic document management system in the Organic Rule case described by Coenen et al. eliminated the need to make three copies of each comment and saved the USDA $300,000 in copying and labour costs.

Costs for the more innovative participatory methods can be higher than for traditional public comment and hearing methods. But costs can only be compared if the same gains are achieved. Against the costs of an IA Focus Group effort, including preparation, moderation and documentation, there is the gain of group discussion on complex global and/or regional issues giving a multitude of perspectives, providing insights which would not be acquired using non-dialogic methods.

There are also costs of non-participation in decision-making (Busenberg, 2000). For instance, UK planning legislation prescribes that an 'award of costs' against an authority is possible if applications are refused for improper reasons; in Huitema's case local government feared this possibility was real. In the US there is always the fear of legal suits. Gains from investments in reaching out to different target groups may be considerable; there is no assurance that resources invested will necessarily yield a high political return in a better informed, more acquiescent, or supportive minority community as Halfacre reports.

Flynn points out the relation between the resources an authority puts into a participatory process and influence of the participation process. In a number of citizen jury cases in Germany a great degree of resources have been given by the federal and state governments which permitted more time and larger numbers to be involved (up to 25 jurors over 5 days as the norm). As a result there was much more interest from these authorities in the findings as well as an increased likelihood that they will respect them.

There are not only costs for the organisers but also for participants in terms of time and resources (Marinetto, 2003). Participation can be a time-consuming process. The time that participants have to spend depends on the length and type of the process. Some of the innovative methods such as citizen juries described by Flynn involve serious time commitments in a short period. In the Groningen mobility plan the total process took 18 months and therefore some people dropped out and lost interest. Second, there is the problem of information overload. In the Groningen case the participants judged the quality of information as good, but sometimes the amount was excessive. This could have discouraged participants during the process, especially lower-educated ones. It is remarkable that the participants themselves reported that they did not see the information overload and time requirements as much of a problem, nor the duration of the total process.

Some processes expect participants to continuously participate in decision-making. In the Albertslund case the so-called user group is a form of binding citizen involvement in policy-making, within structures overseen by elected or appointed officials. In overseeing and reacting to all proposals before they are passed on to the municipal council, it is probably unrealistic to rely on non-binding, ad-hoc participation by individuals. As Woltjer put forward for infrastructure planning, people simply do not have the time, or find it unnecessary, to continuously participate in decision-making. But Coenen et al. conclude that what in fact is created in Albertslund through this user group is a new form of representative democracy, that at best, is a form of more direct democracy.

There is a clear difference in how demanding processes are for participants. But these demands not only depend on the time commitments but also on how

demanding the process is. For instance, thinking about the sustainable development agenda of one's own community described in the chapters that deal with LA21 is more demanding for participants than reacting to a siting decision. It asks participants to constructively comment on proposals requiring a variety of 'skills', and the ability to formulate alternatives and counter arguments. Further participatory decision-making on strategic issues requires knowledge and time generally not available to individual citizens. The organic food rule from Chapter 6 illustrates that a relatively easy manner of obtaining information and reactions through the Internet raises the number of participants involved quite spectacularly. The ACT case from the same chapter illustrates how a less traditional participation approach can be less demanding on citizens.

Woltjer concludes that a broad-based participation strategy may not always be desirable if a process in infrastructure planning is too complex, requires too much specialised knowledge and a high degree of homogeneity of interests. If people simply do not have the time, or find it unnecessary to continuously participate in decision-making, than the type of participation strategy chosen can influence representation. Authorities can influence representation through the way the participation process creates demands for the participants, in terms of time and the issues addressed.

11.7.2 Types of Decisions

The type of decision further limits the improvement of the quality of analysis by engaging participants in the assessment and monitoring of alternatives. Different types of decisions ask for different analysis and therefore different participation methods and institutional arrangements. In the perspective of environmental related decision-making, we have seen examples of:

- Single issues such as infrastructure projects
- The sustainable development agenda of one's own community
- Locally-unwanted land uses such as hazardous waste treatment facilities
- Choices that affect the lives of the members of the community

We see a difference in decisions that directly affect participants and decisions about strategic goals, norms, and values. In these strategic decisions it is not clear what is at stake for the participants, and decisions on these issues are not of immediate interest to the participant. Decisions that directly affect the participants can range in terms of technical complexity, controversy, and conflict of interest.

The second category of more strategic decisions creates social dilemmas. As Coenen et al. discuss, this is particularly relevant to sustainable consumption. Many decisions to consume may be very rational from the perspective of the individual consumer but not from collective interests with respect to sustainable development and the prevention of environmental degradation. The experiences with LA21 in the chapters by Coenen and Oels show it is difficult to get citizens and interest groups

involved in abstract, strategic, issues. It is easier to attract citizens to concrete discussions on the 'here and now' and liveability, than to involve them in the 'there and then' discussion of global and future problems. The case of the sustainable water strategy described by Coenen et al. proves that community involvement can be used to show that a water supply strategy involves choices that affect the lives of the members of the community. For locally-unwanted land uses such as the hazardous waste treatment facilities described in Huitema's chapter, a major problem is gaining acceptance from surrounding communities. Participatory processes can play a role here.

Woltjer analyses of conceptions of planners in practice, notes that it is typical for infrastructure planners to want to gear participatory decision-making towards specific, ad hoc, and piecemeal decision-making; emphasising individual projects rather than using participation for coherent, comprehensive plans. We can conclude that the range of application and employment of these methods is limited. They are not simple panacea that can always be used; it really depends on the purpose of public participation and the type of decisions.

Planning cells and citizen juries have been applied mainly to local or regional single-issue problems. Citizen juries often deal with fairly specific decisions. Flynn puts forward that the citizen jury approach seems better equipped to cope with value issues, although jurors are also quite capable of coping with highly complex technical issues. Citizen Juries are less appropriate for solving especially difficult environmental disputes; in these cases Meditation or Alternative Dispute Resolution (ADR) could be better approaches. Oels also states that mediation might be a more promising method to use for issues involving conflicting interests.

A focus group approach discussed in the chapter by Halfacre can be used to get a better insight into how controversial and problematic a particular site is for different groups of citizens. If participation deals with complex policy issues such as global climate change then, as Welp et al. point out, procedures are needed which allow ordinary citizens to access expert knowledge and make informed judgements. Conventional focus groups are not well suited to providing information for integrated assessments, but IA Focus Group procedures allow ordinary citizens to become involved in assessment processes for highly complex environmental issues such as global change.

11.7.3 Create the Right Environment for the Assessment

What further limits the improvement of the quality of analysis by engaging participants in the assessment and monitoring of alternatives is the environment in which this assessment takes place. Many of the examples in this book are not the more 'simple' traditional consultation methods like public hearings but methods that involve selected groups like focus groups, citizen juries and Future Search Conferences. These more innovative methods are supposed to create a better environment for participants to discuss alternatives and add to the quality of the assessment

because deliberation plays a more important role. Deliberation raises the quality because dominant interests are excluded or balanced and participants are given the time and resources to understand an issue before they are asked for advice.

The problem in the more traditional methods is a bias towards certain opinions, either because certain interests are not present or through the dominance of a certain interest. Because of these dominant actors, participants don't feel they are in a secure environment to express their ideas. Participants also have little control over the agenda for information exchange which makes real deliberation difficult.

Buzz words are empowering, informing, and build trust among participants. Halfacre shows that focus group sessions provide a secure environment for discussants to express their concerns. The focus group method empowers individuals to express themselves freely, and expand upon points and arguments. This 'empowering' is important for individuals from marginalised groups who may not feel confident in expressing their opinions. Flynn argues that citizen juries' deliberation is arguably much more extensive and far ranging than focus groups, as it empowers 'ordinary' citizens to be more flexible in determining the scope and scale of the agenda for deliberation. What IA Focus groups distinguish from other types of focus groups is bringing together expert knowledge and the views of ordinary citizens.

Oels reports on both investigated Future Search Conferences that they established an over all collaborative mode of deliberation which struck conference participants as exactly the opposite of the adversarial rituals of party politics. Participants at both conferences showed themselves impressed by the level of responsibility and commitment displayed by their fellow participants. They reported that they had treated each other with a previously unknown amount of respect.

Who organises the participation process is important for the creation of the right environment. In the German case study, those who organised the Future Search Conference as volunteers decided that it was time for the Council's professional staff to take over the burden of coordination. In the absence of capable Council staff, this created a leadership vacuum.

In Local Agenda 21 the role of local authorities changed from that of director to facilitator. Municipalities are not supposed to play a dominant role in LA21 environmental processes, but act as a facilitator and partner in an open dialogue. However, the appeal in Chapter 28 clearly expects a leading role for municipalities in organising the dialogue. This results in LA21 processes having to find their own way in regular decision-making processes. Without adequate and serious involvement by local authorities this will not work.

11.8 Limitations in Improving Implementation Through Public Participation

The third instrumental purpose of participation we distinguish is broadening public support, reducing the level of conflict, and facilitating action and implementation. *What limits and enables public participation to broaden public support, reduce the level of conflict, and facilitate action and implementation*?

In Section 11.4 we interpreted better implementation as avoiding implementation problems. Implementation problems can arise from a lack of information, legitimacy of a specific decision, or a general lack of trust in the organisation that makes the contested decision.

Innovative methods such as the Future Search Conferences facilitated a new local knowledge base amongst the conference participants that can contribute to action and implementation after the conference. What limits this function is that this knowledge base is not extended beyond the conference room and was therefore not drawn upon by the local Council for their formal decision-making processes. Both conferences only involved a tiny proportion of councillors and officers. Therefore, the conference offered little opportunity for the formal holders of political power to learn.

A general condition for successful implementation is building commitment and trust among policy target groups and gaining cooperation from co-implementing actors. The legitimacy of a specific decision depends on the type of decisions. Woltjer shows that project managers are often reluctant to allow interest groups and citizens to take part in decision-making. When confronted with a technically complicated project, project managers aim their participatory processes towards improving the use of knowledge and new ideas. In situations dominated by process complexity, project managers aim at support and acceptance.

There is a difference between commitments reached within the conference or jury room. Oels argues for her cases that the constructive conference atmosphere was only possible because it did not threaten anyone's interests.

Flynn points out that participation methods are restricted on reaching commitment compared with the outside world. A citizen jury does not tell us how the actual disputants can be reconciled, nor does it provide a suggested area of consensus for the protagonists. If any consensus is reached it is merely that of 'ordinary citizens' under tightly controlled conditions, which might not be representative for the world outside the jury room.

It may also be the case that consensus and commitment is only reached in a particular decision-making phase. In the regional planning strategy for Southeast England, each phase involved different approaches and styles of engagement with varying configurations of interest. During the process there was an increasing 'opening-up' of the policy-making process to business interests and a 'closing-down' of participation opportunities for local interests that occurred at the Public Examination.

References

Abelson, J., Forest, P. G., Eyles, J., Smith, P., Martin, E., & Gauvin, F. P. (2003). Deliberations about deliberative methods: Issues in the design and evaluation of public participation processes. *Social Science & Medicine, 57*(2), 451–482.

Beierle, T. C. (2000). *Quality of stakeholder-based decisions: Lessons from the case study record.* Resources for the Future. RFF Discussion Paper 00–56.

Beierle, T. C. (2002). The quality of stakeholder-based decisions. *Risk Analysis, 22*(4), 739–749.

Beierle, T. C. & Cayford, J. (2002). *Democracy in practice: Public participation in environmental decisions*. Washington, DC: Resources for the Future.

Busenberg, G. J. (2000). Resources, political support, and citizen participation in environmental policy: A re-examination of conventional wisdom. *Society and Natur al Resour ces, 13* (6)/ September, 579–588.

Checkoway, B. (1981). The politics of public hearings. *Journal of Applied Behavior al Science, 17*, 566–582.

Chess, C. (2000). Evaluating environmental public participation: Methodological questions. *Journal of Environmental Planning and Manag ement, 43*(6), 769–784.

Chess, C. & Purcell, K. (1999). Public participation and the environment: Do we know what works? *Environmental Science and Technology, 33*(16), 2685–2691.

Creighton, J. L., Priscoli, J. D., & Dunning, C. M. (1998). *Public in volvement tec hniques: A r eader of ten year s experience at the institute for water r esources*. IWR Research Report 82-R1, Alexandria, VI: The Institute.

Crosby, N. (1995). Citizen juries: One solution for difficult environmental questions. In O. Renn, T. Webler, & P. Wiedemann (Eds.), *Fairness and competence in citizen participation: Evaluating models for environmental discourse*. Boston, MA: Kluwer.

Fischer, F. (2000). *Citizens, e xperts and the en vironment: The politics of local knowledg e*. Durham, NC: Duke University Press.

Fitzpatrick, P. & Sinclair, A. J. (2003). Learning through public involvement in environmental assessment hearings. *Journal of Environmental Management, 67*(2), 161–174.

Gregory, R., McDaniels, T., & Fields, D. (2001). Decisions aiding, not dispute resolution: Creating insights through structured environmental decisions. *Journal of Policy Analysis and Management, 20*(3), 415–432.

Habermas, J. (1984). *Theory of communicative action – volume 1. Reason and r ationalization of society*. London: Heinemann.

Halvorsen, K. E. (2001). Assessing public participation techniques for comfort, convenience, satisfaction, and deliberation. *Environmental Management, 28*(2), 179–186.

Halvorsen, K. E. (2003). Assessing the effects of public participation. *Public Administr ation Review, 63*(5), 535–543.

Hendriks, C. (2002). Institutions of deliberative democratic processes and interest groups: Roles, tensions, and incentives. *Australian Journal of Public Administration, 61*(1), 64–75.

Huitema, D. (2002). *Hazardous waste facility siting in the UK, the Netherlands and Canada. Institutions and discourses*. Dordrecht, The Netherlands/Boston, MA: Kluwer.

International Association for Public Participation. I.A.P.2. (2003). *Public participation toolbox*. www.iap2.org

Innes, J. E. (1999). Evaluating consensus building. In S. S. Lawrence, S. McKernanan, & J. Thomas-Larmer (Eds.), *Consensus building handbook: A compr ehensive guide to r eaching agreement* (pp. 631–671). Thousand Oaks, CA: Sage.

Lafferty, W. M. & Meadowcroft, J. (Eds.) (1996). *Democracy and the environment: Problems and prospects*. Brookfield, VT: Edward Elgar.

Lawrence, R. L. & Deagen, D. A. (2001). Choosing public participation methods for natural resources: A context-specific guide. *Society & Natural Resources, 14*(10), 857–872.

Lindblom, C. E. & Cohen, D. K. (1979). *Usable knowledg e. Social science and social pr oblem solving*. New Haven, CT: Yale University Press.

Marinetto, M. (2003). Who wants to be an active citizen? The politics and practice of community involvement. *Sociology, 37*(1), 103–120.

Meadowcroft, J. (2004). Participation and sustainable development: Modes of citizen, community, and organizational involvement. In W. Lafferty (Ed.), *Governance for sustainable de velopment: The challenge of adapting form to function*. Cheltenham, UK: Edward Elgar.

Peelle, E., Schweitzer, M., Munro, J., Carnes, S., & Wolfe, A. (1996). *Factors favorable to public participation success*. Report for U.S. Department of Energy. Oak Ridge, TN: Oak Ridge National Laboratory.

Petts, J. & Leach, B. (2000). *Evaluating methods for public participation: Literature review*. R&D Technical Report E135. Environment Agency, UK.

Rowe, G. & Frewer, L. J. (2005). A typology of public engagement mechanisms. *Science, Technology & Human Values, 30*(2), 251–290.

Rowe, G. (2000). Public participation methods: A framework for evaluation. *Science, Technology & Human Values, 25*(1), 3–29.

Rowe, G., Marsh, R., & Frewer, L. J. (2004). Evaluation of a deliberative conference. *Science, Technology & Human Values, 29*(1), 88–121.