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Working Party on National Environmental Policy

OECD PROGRAMME ON SUSTAINABLE CONSUMPTION

POLICY CASE STUDY SERIES:
PARTICIPATORY DECISION-MAKING FOR SUSTAINABLE CONSUMPTION

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FOREWORD

This Report is a scoping study on trends and issues for participatory decision-making processes related to household consumption patterns. It is part of the policy case study series of the 1999-2001 Programme of Work on Sustainable Consumption (see below). The purpose of the paper is to elaborate on current theory and practice in this area and to raise key issues concerning the impact of public involvement in public decision-making processes related to household consumption patterns, and the impact on consumer behaviour of active political participation (*e.g.* for voluntary behaviour modification, receptivity to economic or regulatory measures, etc.). The paper:

- provides traces general trends in the use of participatory decision-making and identifies ways of categorising and describing those processes;
- identifies the theoretical and practical issues, for both policy development and consumer involvement, implied by the use of wider participatory decision-making mechanisms related to household consumption patterns; and
- explores four examples in OECD countries in the use of participatory decision-making processes in the development of public policy related to household consumption patterns (mobility, buying green products, water consumption and organic food).

The scoping study was written by Johan Woltjer, Dave Huitema and Frans Coenen from the Center for Clean Technology and Environmental Policy (CSTM), University of Twente, The Netherlands. This report was submitted to the Working Party on National Environmental Policy (WPNEP). It is published under the responsibility of the Secretary-General of the OECD.

The OECD Programme on Sustainable Consumption

The OECD 1999-2001 Work Programme on Sustainable Consumption provided new data and analysis to help OECD member countries reduce the environmental impacts from household consumption patterns. The Programme combined empirical studies of consumption trends in OECD Member countries with conceptual and policy analysis. Programme elements included: development of an economic conceptual framework to set out boundaries of analysis and policy to influence household decisions; sector case studies documenting trends, environmental impacts, and policy options in five key areas of household decision-making; policy case studies to deepen analysis of policy instruments that influence household consumption of final goods and services; and refinement of a body of indicators to assess progress towards more sustainable consumption patterns. The results of these 8 elements of work are published separately and drawn together in a Synthesis Report (see below). For more information contact the OECD Environment Directorate: www.oecd.org/env/consumption.

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OECD Environment Directorate 1999-2001 Programme on Sustainable Consumption

PUBLICATIONS AND UNCLASSIFIED DOCUMENTS

Towards Sustainable Household Consumption? Trends and Policies in OECD Countries	OECD 2002
<i>Synthesis Report of the 1999-2000 Programme on Sustainable Consumption</i>	Forthcoming publication
Conceptual Analysis <i>Towards Sustainable Consumption: An Economic Conceptual Framework</i>	ENV/EPOC/WPNEP(2001)12/FINAL
Sector Case Studies <i>Household Food Consumption: Trends, Environmental Impacts and Policy Responses</i> <i>Household Tourism Travel: Trends, Environmental Impacts and Policy Responses</i> <i>Household Energy and Water Consumption and Waste Generation: Trends, Environmental Impacts and Policy Responses</i>	ENV/EPOC/WPNEP(2001)13/FINAL ENV/EPOC/WPNEP(2001)14/FINAL ENV/EPOC/WPNEP(2001)15/FINAL
Policy Case Studies <i>Information and Consumer Decision-making for Sustainable Consumption</i> <i>Participatory Decision-making for Sustainable Consumption</i> <i>Policies to Promote Sustainable Consumption: An Overview</i>	ENV/EPOC/WPNEP(2001)16/FINAL ENV/EPOC/WPNEP(2001)17/FINAL ENV/EPOC/WPNEP(2001)18/FINAL

EXECUTIVE SUMMARY

A recurrent theme in the discussion of modern environmental problems is the need to more fully engage the public. At a minimum *engagement* means using information to raise consumer awareness of the environmental impact of their purchases and behaviour. Increasingly, however, *engagement* is also taken to mean an active participation of the consumer/citizen in public decision-making processes as one of several "stakeholders" or "partners".

This paper elaborates on current theory and practice in this area and raises key issues concerning the impact of public involvement in public decision-making processes related to household consumption patterns, and the impact on consumer behaviour of active political participation (*e.g.* for voluntary behaviour modification, receptivity to economic or regulatory measures, etc.).

Many OECD countries have long standing traditions of extensive citizen involvement and are looking for new, and complementary, ways to include citizens in policy making. Yet, if government information provided to the public has increased greatly over the past decade and consultation is also slowly expanding, active participation and efforts to engage citizens in policy-making on a partnership basis are still rare and confined to a very few OECD countries. However, the body of empirical experience is growing, and it is possible to identify some theoretical and practical issues that illustrate the possibilities of participatory decision-making to promote more sustainable household consumption. Some general findings:

- The impacts of participation on policy and consumer decision-making

Expanding public debate and involvement in policy development related to consumption patterns through participatory decision-making mechanisms can not only help improve policies (by providing consumer input on needs and priorities) but also contribute to generally increasing consumer awareness and commitment to environmental issues. This is an area which is likely to increase in importance in the years to come, particularly as governments adopt partnership or "multi-stakeholder" approaches to environmental policy development. There is insufficient experience with the impact of participation on consumer decision-making.

- Institutional and process characteristics

The institutional characteristics (rules about who has what authority for different elements of the process) and process (timing and resources) of the participatory decision-making process are crucial for the final outcome. Similarly, the type of information and feedback offered to and by participants also influences the outcome. This means that before shaping a participatory process it is important to be clear about what kind of information or exchange is needed (*e.g.* lay knowledge, local information, opinions and support) and what emphasis will be given to the input of different participants.

- Participatory decision-making and representative democracy: a conflict?

Citizen participation often carries connotations of *direct democracy*. Whether or not this is compatible with representative democracy is a topic of intense debate, with one strand of analysis stressing

the complementarity of participatory mechanisms and conventional ways of decision-making while other analysis points to potential conflicts with representative democracy, for example because participants are not elected and cannot be replaced. The different case studies show that it is possible to work on representativeness through the way one approaches the public, but the overrepresentation of certain interest groups can be an important problem in some participatory processes.

- Engaging a critical mass

One of the areas where participatory decision-making has most clearly made ground is in Local Agenda 21 initiatives. Participation has provided useful data and more information in the formulation of LA21 plans and has influenced the public's general attitudes to the environment. Most municipal initiatives, given the lack of economic, judicial and legal support from the central government, rest on "voluntary" or soft approaches. Citizens must be an active part of this process. A promising tool for expanding government-citizen interaction at both local and central government levels is the use of the Internet and interactive media.

- Gauging the "effectiveness" of participation

The effectiveness of participatory decision-making depends on the type of effect one wants to achieve (*e.g.* citizen empowerment in its own right, the improvement of decision outcomes) or on the perspective taken towards environmental quality and its ethics. Neither theorists nor practitioners provide absolute clarity on what successful participation means. Instead, there is greater consensus on how an effective or successful participatory process works. (See for instance the OECD PUMA "Guiding Principles for Engaging Citizens in Policy Making" - www.oecd.org/puma).

What is the potential contribution of more active participation in decision-making for promoting more sustainable consumption patterns? Theoretical analysis and practical experience outline many promising features of participation, but also some limitations. This means that the decision to engage in more or less active participation must include a careful consideration of not only a number of practical considerations, such as the availability of adequate mechanisms, information, resources and time, but also of the objectives behind participation and the public's interest and perception of their role in the decision-making process. Agenda 21 calls for a stronger engagement in participation by OECD governments than is suggested by the small number of cases of participatory decision-making existing today.

Empirical cases show that participation can change the direction of policy in ways policy makers may have been reluctant to propose for fear of constraining consumer freedom. As a result, it is important to emphasise not only the decision-making process, but also its potential substantive outcome. Participatory decision-making can be an instrument to increase the local and regional relevance of sustainable consumption decisions, to build good understanding and knowledge about possible consumption patterns, and - by relying on representative government - to ensure an emphasis on collective interests, long term solutions, and coherent policies.

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1. INTRODUCTION

A recurrent theme in the discussion of modern environmental problems is the need to more fully engage the public. At a minimum *engagement* means a greater awareness by consumers of the environmental impact of their purchases and behaviour. The primary means for promoting that increased awareness is usually through information dissemination. Increasingly, however, *engagement* is also taken to mean an active participation of the consumer/citizen in public decision-making processes as one of several "stakeholders" or "partners". Here the means for promoting engagement are much more numerous, ranging from traditional public hearings and focus groups to more intensive public "construction" of alternative development or environmental protection strategies. Each of these mechanisms is premised on a different set of assumptions and expectations concerning consumer/citizen involvement in the decision-making process and desired outcomes.

The call for participatory decision-making is common in work on sustainable consumption. 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 (by helping private and social welfare objectives converge). A second assumption, or hope, is that public participation may also result in behaviour change by consumers. A number of questions arise:

- What defines 'participatory decision-making'?
- What are the conditions for effective public engagement in decision-making processes related to household consumption patterns?
- When are participatory approaches a more appropriate strategy than traditional consultation or planning mechanisms?
- Is there a link between participatory decision-making and environmental awareness and behaviour change?

To further explore these issues, the OECD Environment Directorate commissioned a paper on trends and issues for participatory decision-making in the area of sustainable consumption policy. The purpose of the paper is to elaborate on current theory and practice in this area and to raise key issues concerning the impact of public involvement in public decision-making processes related to household consumption patterns, and the impact on consumer behaviour of active political participation (*e.g.* for voluntary behaviour modification, receptivity to economic or regulatory measures, etc.). The paper:

- Provides a background that traces general trends in the use of participatory decision-making and identifies ways of categorising and describing those processes;
- Identifies the theoretical and practical issues, for both policy development and consumer involvement, implied by the use of wider participatory decision-making mechanisms related to household consumption patterns; and
- Explores four examples in OECD countries in the use of participatory decision-making processes in the development of public policy related to household consumption patterns (mobility, buying green products, water consumption and organic food).

This section provides a general overview of the trends in the use of participatory decision-making for environmental policy in general, and more specifically for environmental problems related to household consumption patterns. Further it introduces some of the key themes in participatory decision-making.

Section II provides a brief review of the concept of participatory decision-making. It introduces different types of participatory decision-making and discusses the difference between the traditional consultation practices and the more recent approaches.

Section III explores the theoretical and practical issues for both policy development and consumer involvement of participatory decision-making mechanism related to household consumption patterns.

Section IV explores four examples of the use of participatory decision-making that address environmental problems related to household consumption patterns: mobility, buying green products, water consumption and organic food.

Section V summarises the key issues for effective participatory decision-making related to household consumption patterns and identifies further areas for future analysis.

Trends in participatory decision-making

The trend in the use of participatory decision-making for environmental policy in general, and more specifically for policies related to sustainable household consumption patterns, is related to debates on democracy. The 19th and early 20th century saw various battles, which have shaped most OECD democracies. The first related to suffrage and the widening of the circle of people with a right to vote. The first participatory rights, outside the sphere of voting, was given to ‘those with an interest’ in a decision, often meaning property owners, who had to be heard before governments took decisions (McAuslan, 1980). After the Second World War, the idea that property ownership was the only valid entitlement to participatory rights waned. The circle of people/organisations who were considered to have an interest in decisions, and consequently ‘standing’ in official procedures, expanded in that time as newly emerging activists were helped by a liberal interpretation of rules of standing by the courts. In most countries, it became normal to see environmental groups as actors with an affected interest in environmentally relevant decisions. These “principles” of participation themselves continue to be refined and there is a certain sense that they are becoming more and more binding to government (judicialisation).

Generally speaking, there was a great desire to democratise environmental decision-making in governments and the general public in the late 1960s and early 1970s. However, the interest in participation already started to wane in the 1970s and all but disappeared in the 1980s, except perhaps for environmental organisations, which quickly professionalised and become acknowledged ‘stakeholders’. In the 1970s, the main instruments of government-citizen interaction, mainly hearings or inquiries, were still used but with growing dissatisfaction. The disappointment was shared between government officials, who felt that hearings easily turned into opposition rallies, and environmental groups/ordinary citizens, who often feel that their input had little influence at the end of the day. Dissatisfaction with traditional public consultation has been amplified by greater access to information, and the spread of the originally North-American ideas about environmental assessment and ‘right to know’ to other parts of the world.

Currently there is a renewed and increasing interest across OECD countries toward participatory environmental decision-making (see the Aarhus Convention; OECD, 1999; Bacow & Wheeler, 1984; Susskind & Cruikshank, 1987). The increase of interest in citizen participation differs per country and may be caused by various factors. The actual use of participatory decision-making mechanisms also appears to

depend on the public's desire to participate, which seems to be greater for more concrete issues than for abstract ones and to change over time, but is also culturally biased. It also appears to depend on the degree to which the public holds veto power over the results of the ordinary decision processes, either by legal or extra-legal means.

At the international level, a certain amount of pressure for harmonisation of arrangements for citizen participation is observable. The European Union in particular acts as a unifying force through its regulations, especially on environmental assessment. Davis (1996) however found that implementation of EU directives in the member states still reveals considerable differences.

Finally, one can point out that the environmental problematic has changed considerably since the 1970s. The environmental problems we are facing now play at higher geographical scales and seem to transcend the level of local property rights. At the international level, there is a tendency to stress mutual learning and community involvement. Participation is seen not only as a counter-force against polluters, but also as a potentially constructive instrument. Citizens involved in participatory processes must not only design innovative solutions, but also start to feel responsible for problems. Certainly in situations where consumers (who are often 'diffuse' sources of pollution) are responsible for environmental problems, this seems important.

Participatory decision-making and sustainable consumption

In the 1980s the dominant environmental protection philosophy focussed to a large degree on emissions of harmful substances from factories and how to reduce such emissions. Given the fact that much has been achieved along this line and emissions have been drastically reduced from production processes there is a logical shift to the products themselves. This has brought a change of focus towards *consumer products*, and the accompanying generation of waste, as a major source of environmental problems. This approach brings the individual consumer into a much more important position in terms of preventing environmental damage.

In the past citizens have participated in environmental policy making. What is the difference between citizens and citizens as consumers? Consumers have influence on policies through two arenas; the market and politics. Consumer influence in the market system makes use of the mechanism of consumer power. Consumer power means that large numbers of consumers make the same environmentally friendly choices at the same time, which has two effects: it gradually eliminates the environmentally unfriendly products and creates a demand for their more environmentally friendly alternatives. Consumer influence in the political system makes 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.). Here the consumer equals the citizen. These two arenas are interrelated because a consumer movement in the market can be picked up by the political system and translated into government action.

A case to illustrate this is the prohibition of phosphates in laundry detergents in Norway where consumers, in this case housewives, played an important role in this environmental success. At the end of the 1960s detergents had already attracted attention: they were largely the cause of a serious algaebloom problem in the Norwegian lake Mjosa. An appeal in a newspaper for collective action among housewives in the lake district to stop using phosphate detergents led to a voluntary agreement between government and detergent producers. By 1978 non-phosphate detergents had reached a market share of 70%. Enthusiasm among housewives gradually fell, probably because of inferior washing results. In the eighties there was much discussion on two solutions to the phosphate problem - investing in water treatment or not

washing with phosphates - which finally lead to prohibition legislation. The case illustrates the way consumers can influence environmentally friendly choices and the interrelation with the political system.

Arguments for participatory decision-making in household consumption oriented policies relate to three categories of general arguments for public participation:

1. Participation will increase the legitimacy of decisions taken and reduce the level of conflict. Participation in the development of national and local consumer oriented policies 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. Without participation decisions taken will not be seen as legitimate because they will not reflect the will and values of the people.
2. Participation contributes to the quality of decision-making, because participation gives government information necessary for decision-making and contributes to the systematic identification of problems and their causes and the consideration and assessment of alternative strategic options.
3. Through participation, people will learn of the environmental problems that society faces (*e.g.* due to unsustainable consumption).

Box 1. Sustainable consumption as a political issue

In many countries, concern about sustainable consumption has grown in recent years (*e.g.*, UN, 1998). In line with the Brundtland 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 quality 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 (Oslo Symposium, 1994). Sustainable consumption is closely related to sustainable production. "Sustainable production concerns the supply side, focusing on the economic, social and environmental impact of production processes, while sustainable consumption addresses the demand side, focusing on consumers' choices of goods and services, such as food, shelter, clothing, mobility and leisure, to fulfil basic needs and improve the quality of life." (UN, 1998).

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 paper addresses environmental problem related to household consumption patterns. Sustainable consumption addresses the demand side, looking at how the goods and services required to meet basic needs and improve quality of life can be delivered in ways that reduce the burden on the Earth's carrying capacity. The emphasis of sustainable production is on the supply side of the equation, focusing on improving environmental performance in key economic sectors (Robins and Roberts, 1997).

There are 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 to reduce the number and amount of goods and services measured in economic terms;
- allowing the level of consumption to continue to increase, but in addition to strive for more efficiency in production and shifting our pattern of consumption to less environmentally harmful products and services.

The debate of the 1990s on sustainable consumption links back to previous debates of the 1960s, 1970s and 1980s. Firstly about food constraints on population growth (*e.g.* Ehrlich, 1968, Hardin, 1968, Borgström, 1965). Later the debate on "limits to growth" during the 1970s (*Limits to Growth*, 1972, *Blueprint for Survival*, 1972, Georgescu-Roegen, 1971, Mishan, 1977) and during the 1980s under the heading of "ecological economy" (Daly and Cobb, 1991). The Brundtland report of 1987 (WCED, 1987) focused to a large extent on the issue of production (Lafferty and Langhelle 1999). The proposed solutions are primarily aimed at the input stage (resource use) and the output stage of production (pollution and waste), whereas the intermediate stage of consumption was discussed to a lesser extent. Where the Brundtland report is rather uncritical about economic growth, in *Agenda 21* the critical growth debate of the 1960s and 1970s is reflected by means of the concept of "consumption and production patterns" (*Agenda 21*, Chapter 4): "*To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies.*" Since the 1992 Rio Earth Summit there have been six major international conferences held on this subject which have increased discussion on the composition and level of consumption and production.

OECD Member countries have in place, or are developing, a broad range of policies to modify unsustainable patterns of consumption and the behaviour of individual consumers (OECD, 1998). Initial findings of the OED's own examination of these initiatives show the possibilities to shift to less environmentally damaging consumption patterns without sacrificing quality of life. Government actions to change consumption patterns can be taken on national and regional/local government level. Initiatives to influence the 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.

2. DEFINING A COMMON TERMINOLOGY AND REPERTOIRE OF ACTIVITIES INCLUDED IN THE ANALYSIS

2.1 Different types of participatory decision-making mechanisms

Participatory decision-making, public involvement, citizen and community participation are all umbrella terms for many different practices. A very broad categorisation of participatory decision-making can be made either in terms of types of decision-making processes or in terms of different degrees or levels of participation.

Participatory decision-making processes can be classified in many different ways. For instance according to:

- *the institutionalisation of participatory decision-making in legislation* - There is a difference in the extent to which participatory decision-making processes are institutionalised in legislation. Participation literature distinguishes between traditional public consultation and more modern interactive policy making (Woltjer, 2000). Traditional public consultation has often gained a legal basis. This means that there is a more formal consultation procedure with rules for interaction for both government and public. For policies aimed at sustainable consumption one finds only a very limited level of institutionalisation in legislation.
- *the timing of participatory processes or tools in the policy process* - The level of institutionalisation has much to do with the timing of participatory processes or tools in the policy process. In a simple policy or planning stages model, all stages can be coupled with meaningful public participation activities. Relevant stages could be (WHO, 1999): (1) assessing needs and assets, (2) agreeing on a vision, (3) generating ideas and plans for action, (4) enabling action, and (5) monitoring and evaluating. All these stages are relevant for policies aimed at sustainable consumption. Some of the techniques and approaches we describe hereafter are particularly suitable for a certain stage.
- *the methods, approaches or techniques used* - It is possible to define participatory decision-making by referring to a certain number of methods, approaches or techniques which are deemed 'participatory'. Table 2.1 lists several methods and some of their characteristics (compare Fiorino, 1990 and Renn, Webler and Wiedemann, 1997). One way to structure the decision methods is according to the number and nature of participants involved in a certain approach.
- *the function or purpose of the participation* - Different participatory processes or tools have been designed to match the diverse purposes of citizen participation. In Table 2.2 we distinguish between the function of participation in offering the possibility of articulating the interests of the different stakeholders and contributing to the quality of decision-making.

Table 2.1. Some decision methods and their characteristics

Type of decision method	Nature of participants	Characteristics and mechanism
Focus groups	Small group (5-12) representative of the public	Free discussion on general topic with little direction from the facilitator. Used to assess opinions and attitudes. Sustainable consumption example: used for public participation in Integrated Assessment to discuss urban lifestyles and climate change (Ulysses-project, 1999)
Citizen advisory committees	Small group selected by the sponsor	Sounding boards to measure community acceptance. Representation of major organised interests. Mainly instituted by local governments, also by certain major industries. Used extensively in land use planning in the United States, Canada.
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 educated and presented with certain alternatives. Germany (urban planning), Switzerland (waste planning), Spain (public buildings, infrastructure), United States (sewage management).
Citizen's juries/Citizens review panels	Twelve to twenty by stakeholder selected members of public	Panel, consisting of randomly selected group of citizens, studies a certain issue. Citizen's juries are intended to be representative of the community at large. United States (agricultural pollution, organ transplants, appointing candidates for public positions, etc.), United Kingdom (waste policy, health policy, etc). Sustainable consumption example: citizens juries in UK waste policy
Regulatory negotiation	Small number of representatives of stakeholder groups	Representatives of various affected interests are brought together to agree on the content of regulations. United States (a.o. hazardous waste manifest system); Examples Hanson, 1984, Susskind and McMahon, 1985, Fiorion, 1990
Mediation	Representatives of stakeholder groups	Voluntary attempt by parties involved to resolve a dispute - normally assisted by a mediator. United States (site specific environmental disputes and environmental policy disputes).
Consensus conference	10-16 members selected as representative of general public	A lay panel with an independent facilitator questions expert witnesses chosen by stakeholder panel. Sustainable consumption examples, plant biotechnology UK (Ellahi, 1995), food irradiation Denmark (Grundahl, 1995)
Public hearings	Interested citizens	Loosely structured open forums where members of the public can listen to proposals and respond. Use is almost universal, and applied for many issues.

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Public surveys	Large samples representative of the population.	Questionnaires for obtaining a representative portrait of public opinion. Use is almost universal, and applied for many issues.
Citizen initiatives	Potentially all members of national or local population	Citizens place issues on the ballot for voter approval. United States (several environmental measures at the level of the states), Netherlands (land use planning at the municipal level), Germany (soil contamination), Switzerland (diverse range of issues).
Referenda	Potentially all members of national or local population, at least a minimum proportion	Vote cast by the population on an issue. Outcome is binding. Sustainable consumption example biotechnology in Switzerland (Buchmann, 1995)

Table 2.2. Purpose of participation and methods (adapted after Oels, 2001)

Contributing to the quality of decision-making		Articulating the interests of the different stakeholders	
Policy-based	Community-based	Homogenous stakeholder groups	Diverse stakeholder groups
Seeking informed views of citizens	Monitoring and appraisal by citizens	Involving communities of locality and interest	Bringing stakeholders together
Citizens' Jury Consensus Conferencing Focus Groups Deliberative Opinion Poll Citizens' Panel Referendum Teledemocracy	Community Needs Analysis Priority Search Public Scrutiny Village Appraisal Parish Mapping Community Indicators	Involving communities of locality Local Agenda 21 Involving communities of Concern	Public meetings Planning for Real Mediation Consensus-Building Future Search Community Visioning Round Tables

The list of types of decision-making processes could be expanded considerably, but what unites the techniques listed is a *philosophy* about decision-making. This philosophy implies that ordinary people should be involved in a decision process, that common problem solving in a public spirit takes place, and that the outcomes are binding upon others to some degree (see Innes, 1995; Dietz, 1995). There have been many attempts to develop a typology of citizen participation methods. The best known example is the 'ladder of participation' that was presented by Arnstein in 1969. This ladder has eight rungs, *distinguished by degrees or levels of participation*, some of which are qualified as meaningful participation, whereas others are actually non-participation (see Arnstein, 1969: 217). Arnstein is mainly concerned with the degree to which citizens are authorised to take *binding* decisions (Table 2.3).

Table 2.3. Arnstein's ladder of participation

8	Citizen control	Degrees of citizen power
7	Delegated power	
6	Partnership	
5	Placation	Degrees of tokenism
4	Consultation	
3	Informing	
2	Therapy	Non-participation
1	Manipulation	

There are of course various alternative typologies possible. The paper does not discuss each of these, but does point out that in many cases, decision processes will be run on the basis of explicit (statutory) or implicit (informal) rules on who can do what, when, and on which basis. This implies that an institutional framework could be relevant in assessing participatory decision techniques. Elinor Ostrom is a leading author in this field (Ostrom, Schroeder and Wynne, 1993; Ostrom, 1990; Ostrom, 1986; Kiser and Ostrom, 1982). From her, we borrow the idea that in analysing decision processes one can look at various types of rules (Table 2.4):

- *authority rules: i.e.* who has the authority to put forward proposals, what is the decision-making process about and at which government level is the decision to be made?
- *information rules: i.e.* the degree to which citizens are offered free access to the information that is necessary to make the decision [and the degree to which they are assisted in obtaining that information and on determining which information is crucial to the decision.]
- *boundary rules: i.e.* who can participate? These range from rules that totally exclude or prohibit participation of ordinary people to rules allowing anybody in.
- *aggregation rules:* that prescribe which mechanism is used to determine that a valid decision has been reached.

Table 2.4. An alternative ladder of participation, taking into account institutional factors.

Rule type	← Non participatory	-----	Highly participatory →
Authority	<ul style="list-style-type: none"> - citizens do not have the authority to put forward proposals - citizens cannot decide on details and cannot decide on policy - the decision is made at the central level 	<ul style="list-style-type: none"> - citizens and other parties have the authority to put forward proposals - citizens can decide on details but not on policy - the decision is made at the local level with intervening from the central level 	<ul style="list-style-type: none"> - citizens are the only ones who can put forward proposals - citizens can decide on details and can decided on policy - the decision is made at the local level
Information	<ul style="list-style-type: none"> - citizens receive no information and receive no support in collecting it - scientific information is the only information relevant to the decision 	<ul style="list-style-type: none"> - citizens receive information from the authorities and/or private sector but are not supported in processing it - scientific information and local information is relevant to the decision 	<ul style="list-style-type: none"> - citizens receive information and are supported in collecting their own information - local information is the only information relevant to the decision
Boundary	<ul style="list-style-type: none"> - ordinary citizens have no access to the decision-making process 	<ul style="list-style-type: none"> Affected ordinary citizens have access to the decision-making process 	<ul style="list-style-type: none"> All citizens have access to the decision-making process
Aggregation	<ul style="list-style-type: none"> - the decision is to based on judgements of the greatest good for the greatest number by expert-consensus 	<ul style="list-style-type: none"> - the decision must be based on deals between market parties and/or their representatives who make judgements of the various interest involved 	<ul style="list-style-type: none"> - the decision is to be based on consensus resulting from dialogue in the community.

2.2 How do more recent approaches differ from the traditional consultation practices of democratic governments?

‘Interactive policy making’ seems to be one of the new buzzwords, but the boundaries between traditional public consultation and modern interactive policy making are vague. In general, traditional public consultation has often gained a legal basis. Interactive plan making or communicative planning is not a type of public consultation but, rather, a philosophy about planning that makes demands on the way in which spatial planning evolves (Woltjer, 2000). This philosophy includes aspects that are distinctly different from formal public consultation. One of these aspects involves a type of interaction between government, citizens and social groups that is more direct and elapses in an earlier stage than the older formal consultation procedures. The new types of public involvement focus on different forms of citizen

participation and co-operation with interest groups. In many instances where interactive policymaking is used, participants have an opportunity to have a say in the problem definition stage of the planning process. In traditional public consultation participants were only allowed to phrase their opinion later on –*e.g.* after alternatives had been identified.

It would seem that the US and other countries have an interest in participatory mechanisms, but for different reasons. In the US, the litigious political culture needs consensus building forums, which are already present in other political systems, such as mediation and regulatory negotiation. By contrast, the public in other countries has become less deferent than it traditionally was and has demanded greater access to decision-making, as a supplement to the good connections that industry already has to government. In these countries, the 1970s saw the rise of formal and statutory methods of participation (such as hearings) which had been part and parcel of US environmental legislation since the early 1960s. In most cases, governments try to balance various factors when designing participatory mechanisms. Especially the risk of ‘losing the public’ to extra legal action or to court actions seems to create pressure to ‘invent’ new methods of participation. This is for instance observable in the Netherlands, where statutory procedures have led to many deadlocks and extra-legal methods are now being tried (including citizen initiatives).

2.3 What are the assumptions and expectations behind different forms of participatory decision-making mechanisms

Decision-making structures

Citizen participation often carries connotations of *direct democracy*, for instance because those who participate do not want to do so in vain, but to have real influence. Whether or not this desire is compatible with representative democracy is a topic of intense debate. There is a strand of literature that contends that participatory decision-making does not contradict with the rules of representative democracy; nor should it be a substitute for conventional ways of decision-making. In this view, participatory decision-making should be seen as a complement instead of a replacement of ‘conventional’ strategies (*e.g.* Goldberg, 1985; Alexander, 1996; Woltjer, 2000). One argument for this line of reasoning lies in the idea of enrichment of decisions. The purpose of participatory mechanisms is not so much to actually yield decision power, but to generate relevant information to decision-makers. Others (*e.g.* Huitema, 1998; Dryzek, 1996; Williams and Matheny, 1995) are more hesitant about the compatibility of participatory decision-making with representative democracy. One line of argument here is concerned with the representativeness and controllability of participants in a participatory process (who are not elected and can not be replaced). It is often concluded (Fiorino, 1990; Van de Peppel, 1999) that participants in participatory processes are indeed not representative of the wider population, but have more extreme opinions.

Another point to make is that ‘ordinary’ decision mechanisms in OECD countries do not only include representative bodies, but also the bureaucracy and expert bodies. In many cases, environmental issues are considered technically complex or politically sensitive and politicians may feel safer to leave much discretion to the bureaucracy or experts in making decisions. Such a move is often ideologically supported by the notion that experts are neutral and objective (de-politicisation of the decision) and can calculate the ideal decision. Expert decisions are often even less visible than decision processes in representative institutions and are generally closed to the public. The influence of experts may be great especially in situations where they determine the options between which politicians must choose. Despite a vast and growing literature, which points out that experts have their own biases, often have disagreements, and can be politically motivated (see *a.o.* Williams and Matheny, 1995; Jasanoff, 1986), the myth of

objective and scientific rationality is quite strong and often is another argument for not letting citizens participate in decision processes, for instance because they lack scientific competence.

Potential limits to participatory decision-making are also related to the management of the expectations of the parties involved. The difficulty is that inconsequential participation is not very attractive for citizens, whereas influential participation might reduce the playing field for officials and elected politicians. Moreover, political and administrative culture, tradition and experience are also important factors. Both the involvement in early stages of the decision process and the allowed level of participation have to do with culture and participation experiences. In some countries there is a relative lack of experience with citizens participation, and especially early involvement of the general public is new and experimental. The tradition of public participation limits public consultation to information processes. Governments feel uncomfortable and hesitant towards early public involvement.

Public interest in stakeholder decision-making processes

The amount of citizen participation that is allowed by governments is one side of the coin; the degree to which citizens actually wish to participate is yet another. Overall, citizens do not engage in environmental decision-making processes when they do not feel a responsibility or an acute threat. In addition, even if they do feel a responsibility, their capability to articulate wishes and perceptions differs highly. It might be dependent on education level, for example. If people are not affected directly, which for instance may be the case with policy-making about environmental standards, it is likely that only a selective group of people will be interested in participating.

There is another type of participation ladder of great importance for the interpretation of public participation. While the Arnstein type of ladder concentrates on performance constraints on public involvement, there is a second relevant type of ladder that starts from the perspective of individuals aspiring to participate. This second type is concerned with hierarchies (less to more) of political involvement. For instance Milbrath (1965) made an analogy with gladiator spectacles in the classic era. Lowest on the ladder we find participants who are *apathetic*. Their political role is passive and they have a general disinterest in sustainable development and policies. Higher on the ladder we find a group that is minimally involved in political processes. They constrain themselves to information seeking and discussing. In the analogy they are the *spectators*. Highest on the ladder we find the *gladiators* who really battle in the political process by attending meetings, campaigning and fundraising. Political opportunity literature shows that this last group is by far the smallest and that the roles participants take are relatively stable (f.i. Almond and Verba, 1965).

Studies from the 1970s had already revealed that only well informed people with high education levels and high income seize the opportunity to participate (*e.g.*, Jolles, 1974). Men also participate more often than women do (Castenmiller, 1988). Furthermore, people who are already active in society are more likely to engage in participatory decision-making processes (Van Deth & Leijenaar, 1994). This problem of selective participation has been extensively documented in the US political science literature (*e.g.* Dahl, 1961; Lindblom, 1968) and in the public participation literature (*e.g.* Peattie, 1968; Checkoway & Van Til, 1978; Piven et al, 1970). The most distinct problem with selective participation is that participatory decision-making may serve only the common interest of a selection of participants, and not the public interest.

Time and information requirements

Over the last ten years, international political science and planning literature have advocated the need for a participatory resolution of policy problems. Fitting strategies have been explored, particularly at

the local level in North America (Bacow & Wheeler, 1984; Bingham, 1986; Susskind & Cruikshank, 1987). However, the literature has generally ignored the required conditions for participatory decision-making. International experience of the practical implementation of participatory decision-making techniques, such as documented by Crosby et al (1986), Burns & Uberhorst (1988) and Petts (1995), among others, suggest that these conditions include providing for an adequate amount of time for discussion and ensuring that all participants have an equal position in terms of knowledge and capabilities.

Participatory decision-making is demanding for citizens. To have an opinion, people need experience with the matter and need some circumstantial information. Also, when citizens feel that an initiative does not pose an immediate threat to them, some will only object rather than engage in massive action. The capability to articulate concerns and discuss interests related to potentially abstract topics, such as genetically modified organisms, is also often lacking. The main requirement for effective consumer participation is that participants see a sustainable consumption issue as a problem, even though it may not have been labelled as such. In this sense, participatory decision-making for sustainable consumption requires that consumers (including communities, businesses and organisations of civil society) are aware of the possible environmental effects of products and services. Consequently, it would be essential to make available to consumers information, infrastructure and facilities about possible changes in their consumption patterns (UN, 1998).

Mechanisms for participatory decision-making tend 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). Where attempts are made to compensate for these inequities, *e.g.* by intervenor funding such as that applied in the Canadian environmental assessment process, complex issues around the issue of dividing intervenor funding among potential candidates might surface (Huitema, 2000).

3. THEORETICAL AND PRACTICAL ISSUES OF PARTICIPATORY DECISION-MAKING MECHANISMS FOR INFLUENCING HOUSEHOLD CONSUMPTION PATTERNS

3.1 When are participatory mechanisms more appropriate than traditional public consultation models?

Participatory decision-making can be instrumental for policies aimed at sustainable consumption. In this sense, the participation of actors such as environmental organisations, industry or consumers contributes to the quality of decision-making. Participation, for example, provides government with the information necessary for decision-making and contributes to the systematic identification of problems and their causes and the consideration and assessment of alternative strategic options. In this section, we discuss some important issues related to the impact of participatory decision-making on environmental policy making in general, and on sustainable consumption in particular. We mainly elaborate on principles of effectiveness and quality, and the role that participatory decision-making could play herein, and then argue for a contingent approach to participatory decision-making for sustainable consumption.

Considering the implications of participatory decision-making, neither theorists nor practitioners provide absolute clarity on what successful participation means. Important differences of understanding include the directness of participation and the question at what level of scale participation would be most appropriate. In addition, the type of democracy underpinning decision-making in a particular country determines the way a participatory approach for environmental decision-making should be understood. For example, democratic rules and procedures determine to what extent there are fitting conditions for participatory decision-making. Consequently, statements like ‘public involvement’ only have meaning against an institutional background. In this section we will elaborate upon the institutional rules that constitute the circumstances under which participatory decision-making may be or may not be the best course of action.

Whether or not participatory decision mechanisms are introduced is at least partly related to the conception of decision quality that is striven for. It has been argued that both *fairness* and *competence* can serve as meta-yardsticks to assess decision-making procedures (Renn, Webler and Wiedemann, 1995; Webler and Thuler, 2000). *Fairness* implies that the process and outcome are equitable, whereas *competence* refers to the construction of the best possible understanding and agreements given what is reasonably knowable at the time a decision needs to be made. It is clear that reasons of fairness may lead to the introduction of participatory mechanisms of decision-making, especially when a certain group will be hard struck by certain regulatory measures. The right to be heard is quite a fundamental conception in most democracies. The discussion above has made clear that the notion of competence delivers more complicated arguments. For those who believe that experts can deliver the best decisions, citizen participation is not necessary, except perhaps as an extra source of information for experts. For those who believe that representative institutions take best decisions, citizen participation may also play a limited role. There is however also a strand of literature that contends that localised and highly participatory decision-making delivers best results in terms of competence, because at that level people are in continuous interaction, see the results of their decisions, and discuss both values and facts (this strand of literature is called communitarianism, see *e.g.* Etzioni, 1993).

The effectiveness of participatory decision-making of course depends on the type of effect one wants to achieve. There are those who value participation as something worth striving for in its own right. The ideal of the capable and empowered citizen is associated with this strand of thought (*e.g.*, Innes, 1996; Healey, 1997). Effectiveness from this perspective could for instance imply that citizens involved in a decision process become more aware of the problematic and develop their own opinion (which ever it may be). On the other hand, there are those who view participation as a tool for the improvement of decision outcomes (*e.g.*, Hathway, 1997). Even in that respect, many distinctions can be made. Our main argument would be that effectiveness depends on the perspective that people take towards environmental quality and its ethics (Coenen et al, 1998; Howe, 1994; Wachs, 1982). Overall, we would distinguish between a normative perspective (with an emphasis on democratic and emancipatory values) and an instrumental, or functional, perspective (with an emphasis on pragmatic usage). Whereas much of the literature predominantly 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.

In instrumental terms, participatory decision-making processes potentially have some considerable advantages over other decision-making processes. Overall, the instrumental position considers an investment in participatory decision-making to be a way to generate public support, a way to gain time (shorter decision-making processes in the long term), a way to incorporate relevant knowledge (good ideas and lay expertise by participants), and even as a method to gain control (because positions and interests remain transparent). This is also a very pragmatic perspective as participation is put forward as an instrument to incorporate 'good' public contributions into the policy-making products and, thus, arrive at effective policy results.

The relation between participation and decision quality is not self-evident. Two cases of urban traffic planning in the Dutch cities of Groningen and Deventer, for instance, provide examples of participatory decision-making that implied a considerable amount of direct participation of citizens and interest groups (Welles, 1997; Francino, 1994). Evaluations of these cases show that taking the feelings of people seriously can be more important than substantive outcome of the decision-making process. The paper discusses additional cases.

Consumers, however, can also play a role as co-producers of policy. The role of the consumer as citizen is to identify options based on local knowledge and options which have the largest support among those affected by the policies. The paper develops several examples.

Effectiveness is an important regulating principle for participatory decision-making within environmental policies. Effectiveness is also the most important demand that citizens make in order to accept an environmental policy (Environmental Policy Council, 1996). However, an effective decision-making outcome does not by definition imply that this outcome is more sustainable or -even- environmentally friendly. Sustainability often refers to long term impacts and to impacts for large, cross-boundary geographical areas. Here, it seems important interests such as those of future generations or those in other fields of environmental policy are by definition excluded. Experiences with the drafting of Local Agenda 21s in Western-European countries (Lafferty and Eckerberg, 1998) show that issues and themes chosen by the population mainly concern the 'here and now' and less with the 'there and then'. This makes sustainable consumption a difficult issue within LA21 because it requires consideration of the consumption possibilities for other world citizens, particularly less-developed countries, and for future generations to consume equally. Participatory approaches should thus be used prudently.

Hence, before embarking on any participatory approach, a central question should be (how) can participatory decision-making deliver 'good' results? These 'good' results are usually expressed in terms of transparency, better information, more control, and inclusion of local knowledge and creative ideas.

Answers to this question also relate to a concern of efficiency, effectiveness and accountability to all those with a ‘stake’ in sustainability and consumption issues. A particularly strong point of participatory decision-making as it is applied in practice usually is its capability to deliver support and acceptance of a policy amongst the participants involved. However, does such a particular type of effectiveness, with a specific group of participants, also deliver sustainable consumption? It should be born in mind that the impacts of participatory decision-making are comparatively unrelated to substantive quality demands. Participatory decision-making, therefore, has positive as well as negative impacts (Table 3.1).

**Table 3.1. Possible impacts of participatory decision-making
(adapted after: Woltjer, 2000)**

Decision-making process	Decision-making outcome
Positive	
<ul style="list-style-type: none"> • representation of all significant interests; • saving of money and time at later stages of the decision-making process; • improvement of public confidence in government; • accurate information about affected participants; • trust of citizens in the legitimacy of politicians and officials; • match with desires for more democracy, openness, accountability and transparency; • more influence and control over consumption processes; • enlargement of public awareness and responsibility; • construction of coalitions and partnerships as an anticipation of possible conflicts. 	<ul style="list-style-type: none"> • improvement of the quality of information needed for SC; • use of information from a wide variety of sources and experiences; • inclusion of subjective perceptions of quality; • more accurate information about the needs and desires of society; • policy process appropriate to special circumstances and needs; • strong foundation for SC decisions; • good comprehension and knowledge about possible consumption patterns; • high local and regional relevance of SC decisions.
Negative	
<ul style="list-style-type: none"> • decision-making with ‘activists’ and ‘hobbyist’ only, selective participation; • decision-making with ‘opponents’ rather than ‘proponents’; • pursuing ‘group interest’ rather than ‘public interest’; • costly, lengthy and uncontrollable decision-making process; • complex decision-making process due to a high number and variety of participants. 	<ul style="list-style-type: none"> • emphasis on solutions determined by short term, ‘everyday routines’ and individual interests; • fragmented thinking in ‘marketable’ products; • less attention to cohesion in strategic SC; • less importance of professional expertise and technical knowledge; • emphasis on conformism and compromise, leading to ‘gray’ solutions.

We conclude here by saying that determining participation processes for effectiveness is a highly difficult enterprise as the effectiveness usually only makes sense to a particular group of stakeholders at one point in time. Consequently, perhaps the most important characteristic of participatory decision-making is that outcomes should be appropriate in such a particular context (Innes, 1996). We argue that this appropriateness is determined by acknowledging the contingent characteristics of participatory decision-making, which will be discussed in the section below.

3.2 Contingency

Participatory decision-making approaches clearly have something valuable to offer. However, we should also acknowledge its disadvantages, as some situations may not be suitable to allow participation approaches to deliver the desired results. This section, therefore, departs from the notion that a participatory strategy is not desirable for all sustainable consumption situations. The actual power of participation within environmental decision-making diverges highly, depending on type of policy making and the space and time specific political, social and economic contextual conditions (Mädig, 1997; Hill,

1985; Hollihn, 1979; Bryson, 1985). Participatory decision-making processes are to be applied contingently (Bryson & Delbecq, 1979; Woltjer, 2000). This implies that participatory decision-making has to be tailor-made for each situation. We attempt here to discuss the meaning of contingency, and its implication for applying participatory decision-making within the field of sustainable consumption.

Participatory decision-making implies a conditional course of action. To find out whether initiating a 'participation venture' is appropriate, all parties should understand the limitations of the process: participatory decision-making can be a time-consuming process and may be less suitable for problems that require quick and decisive action. Also, authority may remain necessary to ensure that the general interest of participants takes precedence. Participatory decision-making is meaningless without government power to carry out final decisions. Circumstances under which participatory decision-making is best avoided, for example, may include deep-seated societal norms (*e.g.* nuclear energy, genetically modified food) or situations where social dilemmas prevail (*e.g.* behavioural change). These kinds of issues are the issues we elaborate upon in this section.

Complexity

Governance literature in particular shows that complex decision-making situations match participatory decision-making approaches (*e.g.*, Wilson, 1998). Governance relates to "the deliberate formation of formal and informal coalitions by various interests with the aim of providing goods which would not be there if they acted independently" (Harding, 1993). Governance processes are often positioned against a background of growing interdependence. Suitable participatory situations, then, are complex decision-making situations with many different stakeholders in a high interdependence. This idea is consistent with experiences in policy practice, in which policy professionals think that participatory decision-making would be most suitable in complex situations with many interdependent parties and clashes in interests (Woltjer, 2000). Sustainable consumption indeed features some intricate interdependencies between industry, government, environmental interests, and consumers. Policy making here involves decisions about the extraction, the processing, the production, the distribution, and the disposal of materials. At all of these stages, different actors are active who all have a clear dependence on each other's behaviour. It seems that participatory decision-making would fit many of the decision-making processes involved.

Strategic goals and operational realities

The basic question when applying participatory decision-making is whether people are called to participate in decisions about strategic goals, norms and values, or in decisions about operational facts. In line with this, it is important to know for which products consumed there should be an opportunity for people to participate in the production process. The production process may range from extraction to usage and recycling. It turns out that involving citizens or even interest groups in an abstract, strategic problem is very difficult, because an important element for the participation of the actors is clarity concerning what is at stake. Overall, people are inclined to become involved in decision-making issues only when they think that the issue is in their immediate interest. This link between involvement and interest has already been extensively discussed years ago by Sewell and Coppock (1977). The difficulty of involving citizens in strategic policy making may be a plausible 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. Experience shows that a successful participatory process has to deal with concrete problems.

The level at which a decision-making process runs is related to the significance of the decision in question and is important for the possible co-operation of affected parties. For example, participatory decision-making over municipal household insulation projects (at an operational level) clearly differs from participatory decision-making over international taxation systems for non-renewable raw materials (at a strategic level). Strategic decision-making involves the construction of frameworks within which the principles for making operational decisions can be phrased. In strategic decision-making, choices have to be made from a multitude of alternatives. The operational level involves the actual 'furnishing' of the intentions put forward at the strategic level.

Many of the most recent participatory decision-making initiatives have been set at the operational level. The most important reason for this is that these initiatives are mostly aimed at citizen involvement, for which participation works best when they feel a certain affinity with the policy. Of course, one can wonder whether a limitation to only the operational level makes sense. The public could also be involved at a strategic level rather than on implementation issues at the operational level. Finding an unambiguous argument in favour of, or against, the involvement of affected actors at just one decision-making level is difficult. With arguments like 'concreteness', 'survivability' and 'familiarity' of/with an object, participatory decision-making at the operational level could well be best. At the operational level, people immediately see possible direct effects, feel affected and, consequently, have the motivation to take action against undesirable policy measures. On the other hand, when the priority is set on 'importance of the decision', participatory decision-making best happens at the strategic level, which sets the foundations for many decisions to come.

Environmental decision-making at a strategic level often deals with seeking and determining goals and values with which lower levels have to comply. Normative decisions have greater consequences and depend much more on value and appreciation than operational decisions do. They include principles and fundamental choices such as a choice for alternative building materials, for example. It can be argued that decisions on this level specifically need public support since they will determine the setting of people's consumption patterns in the long term. Obviously, however, participatory decision-making at the strategic level requires knowledge, a certain expert view. We come back here to the assertion that one of the limitations of participatory decision-making is that it is affected by material and time constraints (Day, 1997). Especially on a strategic decision-making level, only experts, government officials and interest groups have the knowledge, time and energy to engage in participatory decision-making.

Another relevant question is how participatory decision-making can be applied at decision-making stages. A well-known subdivision into stages is *preparation*, *determination* and *implementation*. Similarly, Gray (1989) describes a three-stage process. For participatory decision-making she attaches much significance to the second stage in which the parties identify the interests that brought them to the table, determine how they differ from the interests of others, and set directions and establish shared goals. However, the first stage is also important. If the involvement of parties does not start in the beginning of a decision-making process, participatory decision-making may easily mean obtaining partial information aimed at committing participants to predetermined decisions. This may indeed be desirable -for example when the use of alternative materials (*e.g.*, wood for concrete) has to be 'forced' over individual economic or local environmental interests. When participants become active at a later stage, however, decision-making agencies most likely only allow for minor changes in the original policy measures since already a great deal of money and time has been invested. Consequently, many authors writing about participatory decision-making approaches agree that only early involvement makes sense (*e.g.*, Connor, 1999). Early participation enables people to exert influence on basic goals of environmental decision-making and possible alternatives.

Social dilemmas

Social dilemmas are of special relevance to sustainable consumption. Social dilemmas explain how individuals may act very rationally from their own perspective in pursuit of their own interest, but that this behaviour may be irrational from a collective perspective (*e.g.*, Dawes, 1980; Schroeder, 1990). Well-known examples are contradictions between the interest of individuals and collective interests with respect to sustainable development and the prevention of environmental degradation. If such contradictions are denied, this may have detrimental consequences in the long run, both for society and ecology. To overcome social dilemmas, representative government may sometimes have to intervene in favour of the collective public interest. Theory and practice feature very different expressions of the term public or collective interest (Gilbert, 1979; Berkowitz, 1979). However, some general conditions must prevail if any public policy can be said to be in the public interest. These conditions include a need to maintain a balance of different interests. The collective interest lies in the quality of the environment for current and future generations and stretches beyond the satisfaction of individual needs. For instance, participatory decision-making may be at odds with interests at a higher level of government. In a decision-making process, people may consider the collective interest but, when actually asked to contribute, consider self-interest. 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.

Supplementing conventional methods

This paper argues that applying participatory decision-making in practice must fit the situation. This also means that, given a specific context, conventional policy making may deliver better results than participatory methods. Many aspects of the conventional approach should be safeguarded when adopting an inclusive decision-making style. Conventional decision-making usually gives sufficient obligations via rules and legislation. This is helpful to participatory decision-making, which can easily turn out to be noncommittal. In this sense, the conventional representative structure can still be an attractive exit option that indicates the strength of the participatory process itself.

In our view, participatory decision-making implies, on the one hand, embracing the principle that the responsibility for sustainable consumption is a shared responsibility amongst government, industry, environmental organisations and consumers, and, on the other hand, acknowledging the special responsibility for government regarding the interests that are not able to participate. These interests usually relate to decisions elsewhere in the life cycle of products, at another level of scale, in a different policy field, or at a different point in time. It is essential to realise that participatory decision-making is unsuitable to cohesively cover all these interests. At best, participatory decision-making efforts provide an impact that complements -not replaces- the impact delivered by conventional, institutional and representative structures.

Throughout the paper we made clear that some policy situations might be unfit for participatory decision-making. As a summary, we can now list those contingencies as follows. Participatory decision-making is:

Suitable for:

- any complex decision-making situation with a high interdependency between actors (where participants cannot implement policies alone).

- directly involving citizens in clear, concrete and operational problems at the local and regional level (direct participation).
- directly involving experts, government representatives and (inter)national interest groups representatives in abstract strategic problems at the national and international level (indirect participation).
- involving stakeholders in an early, preparatory stage of policy development.

Less suitable for:

- problems that require quick and decisive action.
- situations without government power to carry out final decisions.
- situations with deep-seated societal norms and ideologies that constrain a minimal willingness to compromise on normative positions.
- situations where social dilemmas (between individual and collective interests, usually at different levels of scale) prevail.
- directly involving citizens or local interest groups in abstract, strategic problems that requires a certain expert knowledge.

4. CASE STUDY EXAMPLES

4.1 Function of the 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 every case example we describe shortly the policies, the policy design process and the impact of the participatory mechanism on the process. Examples of more sustainable household consumption in these examples concern reducing mobility and using more sustainable modes of transport, buying environmental friendly goods from environmentally friendly production processes, buying organic grown food and reducing water use.

The theoretical part of the paper points to certain variables that are important to illustrate the possibilities of participatory decision-making in consumer oriented decision-making. This will be highlighted by stressing points in the case-studies such as the tension between participatory decision-making and representative democracy, the resources of the participants, the influence and effectiveness of the participation and the timing of participation in the decision-making process.

The four cases we discuss vary across countries and continents, are within different policy fields and on different government levels. The cases concern both strategic and concrete issues with the use of different participation techniques. The consumer-oriented policies studied are both examples of policies that directly influence consumer or policies that try to influence the context for consumer decisions.

The consumers play different roles in these cases. They are a target group that can be mobilised, societal stakeholder but also co-producers of policy. The four examples are:

- the development of more sustainable transportation modes in an open planning process with the users of the traffic system (new urban traffic system in the city of Groningen, the Netherlands);
- sustainable consumption initiatives within a community striving to become a sustainable community, making use of LA21 (Albertslund, Denmark);
- the Internet comment forum established by the United States Department of Agriculture (USDA) on proposed national standards to govern the marketing of organic agricultural products (National Organic Program);
- participation of communities and water consumers in the development of strategies to control water demand (ACT Water strategy, Australia).

4.2 Citizen participation in urban transport planning

Mobility

The growth of the mobility of people and goods is a serious threat for sustainable development. Particularly in urban areas car traffic causes air and noise pollution problems and uses much energy and

public space. City inhabitants, commuters, business travel, freight traffic and visitors are all consumers of the transport system. This transport system can be more or less sustainable depending on the mode of transport. Urban transport plans are difficult because often unpopular actions seem necessary in order to keep cities clean, quiet, accessible, enduring and in the end sustainable. Support of the general public for changes in the system, which at the end are all consumers of the system, is necessary because it affects day-to-day life.

In the Dutch mid-size City of Groningen an open planning process of urban transport was undertaken from November 1995 to May 1997. Several studies have documented this process (Woltjer, 1998, Koolen, 1997, Paf, 1997, Welles, 1997). One of the motives for the city to start a new planning process was the outcome of a referendum on the closure of a particular road. It appeared that many citizens opposed the closure because of their general discontent with Groningen traffic policy. Fearing that a new traffic plan would lack support, the city decided to update the traffic policy with broad participation by the population.

A three phase process

The planning process was subdivided into three phases. The first phase (November 1995-March 1996) was the exploration of problems and solutions. To gain insight into traffic and transport policy problems, a telephone survey among 600 respondents and a questionnaire through a local newspaper (5000 respondents) were undertaken. Two roundtable discussions were held in order to present the results of the surveys and initial conclusions on the main problems. All inhabitants of Groningen were invited to the roundtables. 18 working groups, with a total number of 300 participants, worked out the analyses of the problems and possible solutions.

The second process phase (March 1996-June 1996) was the elaboration of policy directions. The working groups of the first phase evolved into 4 workshops. Participants from the working groups formed these workshops together with traffic experts and representatives of pressure groups. In every workshop different 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 the bicycle
- The real alternative, emphasis completely on public transport

These four alternatives were assessed by experts on the effects on mobility, spatial planning, the economy, the environment, technical feasibility and costs. The calculated policy directions formed the basis for the municipal draft-vision on traffic policy.

The third phase (June 1996-may 1997) was the decision-making phase. Final decisions had to be taken by the local politicians but citizens were still actively involved in this phase. Citizens had the opportunity to react to the ideas in a concept-vision of the city council by writing a written reaction. Further, support for the concept-plan was measured through another questionnaire among the respondents of the first survey in November 1995. The survey and written reactions were used to distil 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. To begin in November 1997 the concept-traffic plan was offered for the formal legally required participation process (official public enquiry). In May 1997 the plan was accepted by the city council.

During the entire process general information was offered to the inhabitants of Groningen through a series of door-to-door information bulletins and through articles in the local newspaper.

The decision-making process resulted in a plan with proposals for a light rail system, car parks outside the city centre and a cycle path system. The main policy conclusions from the process were that mainly the commuters to the city needed to adopt more sustainable travel patterns. They are expected to use public transport and bikes to go to their work. Economically important traffic (freight and business traffic) gets full room and even people who want to shop by car.

Discussion

We can characterise this example as follows. The purpose of participation in Groningen traffic planning process case 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 for all stakeholders and citizens. In practice, the participation process served these purposes in that it gave the government necessary information for decision-making, particularly in problem and cause identification and in developing alternative solutions. Another outcome of the process was that the participants learned more about the environmental traffic problems that the city faces. In the Groningen case 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 by means of representative democracy.

Throughout all planning phases citizens were involved, in remarkably large numbers. The municipality received nearly 10,000 suggestions on how to deal with the traffic problems from about 6,000 respondents. But even the citizens that were not directly involved were well informed about the process through the information bulletins.

Given the many opportunities citizens had to formulate their discontent on traffic policy, one would expect that a large part of the frustration about traffic policies among the inhabitants of Groningen would be taken away. And it was expected that the participation process would raise the support for the new policy. An indicator of this support is that the official public enquiry procedure was relatively short and no main adjustments were made. In addition, separate research after the process found that many participants were more or less satisfied with the final result (Paf, 1997). The research also showed that people had gained more insight 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 the impacts of participation.

The participation process was not representative of all transport system users, because while all the inhabitants from Groningen were consumers of the urban transport system not all consumers were citizens. About half of the working population in the city are commuters from outside the municipality. Further more, the city is an important regional shopping centre that attracts 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 total 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, individual inhabitants accounted for only a small part of the participants in the workshop in the second phase: most participants were members 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 these participants were representative in terms of age. The group of less-active participants is also representative in terms of education. However, active participants with a higher education (University, professional education) were over represented (62,7% compared with 48% in the population).

Several potential barriers can be identified that could have led to this overrepresentation. In the first place the entire process took 18 months; over this time, some people lost interest and dropped out of the participation process. Secondly there was a problem of information overload: the participants judged the quality of information as good, but felt the amount of information was sometimes too much. This could have discouraged participants during the process, especially less-educated participants.

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 the 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 enter new open planning processes in the future. A problem was that the open planning process preceded a formal legal procedure. In that second procedure the local council was a key actor. This touches 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 at the start. They were afraid that an open planning process would lead to an inferior and immature outcome.

In summary, the participation process in this case was a success since the new traffic plan for Groningen did use many of the ideas and contributions of participants and the results of public discussions. The case also shows some drawbacks of a participatory approach. One of them is that highly educated people were 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. Apart from this, however, the main influence of participation on the decision-making process may well be the support for the proposals, especially amongst interest groups and government bodies.

4.3 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 in sustainable consumption. All over the world local communities have taken initiatives either under the flag of Local Agenda 21 or just as an autonomous effort to become a more sustainable community. These initiatives all 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 LA21-initiative in the field of sustainable consumption we will describe the Danish case of Albertslund.

'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. The most important of the four major 'objectives' in Chapter 28 is: *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 is a relatively simple appeal to local authorities to engage in a dialogue for sustainable development with the members of their constituencies. 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. As the level of governance closest to the people, local authorities '*play a vital role in educating, mobilising and responding to the public to promote sustainable development*' (Agenda 21, para. 28.1, United Nations (1993)).

Nowadays around 4,000 municipalities all over the world have started an LA21-proces. As we have seen in Section 1 part of the overall action plan *Agenda 21* that municipalities have to address is Chapter 4. Many municipalities address sustainable consumption as part of their LA21 specifically, like the Norwegian example of LA21 sustainable consumption projects, or more broadly as part of initiatives for awareness raising.

In practice, LA21 initiatives have a strong relationship with the sustainable community movement. Sustainable communities pursue economic development and environmental stewardship on the basis of maximum community participation, empowerment, and local activism, challenging, at the same time, the inevitability of poverty and inequality. They concentrate on the relationships between civic education, civic involvement, economic growth, and environmental protection. A central characteristic of the sustainable communities movement is the pursuit of the institutionalisation of community involvement in formal programs of physical renewal of neighbourhoods, of economic and social regeneration, and of environmental protection and management (Stewart and Collett, 1998).

Sustainable consumption initiatives within the sustainable community movement have their roots in a philosophy about the quality of life. The sustainable consumption literature emphasises that material ownership is not positively correlated with well being. Obviously, non-economic factors are extremely important for the perceived quality of life - health an obvious first priority - but also, relationships, participation, and community are important factors. Services and capacities, not goods, determine the quality of life of individuals and communities.

A municipality generating sustainable consumption

Albertslund is one of the best known pioneering municipalities in the area of LA21 (Holm and Mabui, 2001). It also has links with the philosophy of a sustainable community. The Albertslund Municipality, which has approximately 30,000 inhabitants and is placed in the western suburb of Copenhagen, is a new town that was founded in the 60s. Albertslund has four characteristics that make it especially interesting as an example:

- a population strongly engaged in the environment;
- a strong community sense;
- a culture of public participation; and
- a long history of environmental initiatives.

Due to its social democratic political orientation, Albertslund has attracted a particular kind of environmentally conscious residents since the 1970s. As a result, many citizens have been involved in environmental protection issues over that time. For example, a recent survey showed that 94% of the local residents were willing to pay 1000 Danish kroner more in tax on top of the conventional tax (60%) if it were shown that the money was to be used exclusively to improve the municipality's environment.

This environmental activism is related to a general feeling of common ownership and responsibility in all community matters. This was the basis for a strong tradition of dialogue and corporation between the administration, local stakeholders, citizens and politicians. Public involvement is organised through non-binding direct public involvement, where citizens contribute in public comment

periods, open meetings and citizen advisory commissions and through binding direct policy making within structures overseen by elected or appointed officials. An example of the non-binding involvement is the "User groups", formed in 1980. Each village is represented in the Groups, which expresses its opinion on all matters of environmental significance before they are presented to the Municipal Council. The User Groups is one of the driving forces in the Agenda 21 work. The central actor in Albertslund LA21 is the Agenda Centre Albertslund that was formed in 1996 as an independent institution with its own board, and financed by funds allocated by User Groups and by money from the City of Albertslund ecological pool. The centre has two permanent project employees. Its primary task is to carry out LA21 plans in the area of individual housing while also carrying out specific demonstration projects. An example of these projects is the organic garden project that cultivates exclusively organic crops.

Central in the Albertslund LA21 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 for CO₂-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 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 to be achieved. The various LA21 plans that were developed by the Albertslund Municipality contain intermediate and long-term goals: *e.g.* an intermediate goal to reduce the consumption of groundwater by 35% in the year 2000 and a long-term goal to reduce it by 70% in the year 2050.

Local initiatives and sustainable consumption

Most municipal initiatives, given the lack of economic, judicial and legal support from the central government, rest on "voluntary" or soft approaches. In the field of sustainable consumption this means: customer and supplier requirements of environmentally friendly products; positive and negative incentives; public consciousness and awareness raising activities; and setting a good example by the municipality itself.

Customer or supplier requirements of environmentally friendly products in the value-chain demands are an example of these "voluntary" self-regulation approaches, based on 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 regarding environmental management practices throughout the products' production chain. As an example, the supplier must show that its sub-suppliers, dealers, distributors, products' packaging and waste management processes undertake careful environmental precautions throughout the products' lifecycle.

Indirectly the value-chain demand is influenced by encouraging local consumers to demand "environmentally friendly" products. In principle, the Municipality hopes that, with time, through these activities, the end-use (local) consumers will choose "green" products over their competitors and in return, these market forces will give 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 reporting local environmental offenders in the local newspaper. For example, the Municipality reports all environmental offenders in the local

newspapers' "dirty dozen list" every third month. And awards of recognition are offered to best environmental practitioners. For example, schools that have achieved outstanding environmental performance are allowed to wave a Green Flag on the school building.

Furthermore, the municipality initiates public consciousness and awareness raising activities that are intended to change local public's behaviour and attitudes to 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 media to raise public awareness like 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. And all day care and public institutions have been purchasing organic food while also consuming environmentally friendly office articles.

Discussion

We can characterise the Albertslund case as follows. The 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 taken by the grass-root environmental organisations and the User groups. The process generated much information on the consequences of policies for sustainable development through the use of the environmental latitude concept. In a LA21 all inhabitants of a community can participate. Through the User group citizens have indirect access to the decision-making process. In LA21 the aim is that decisions are based on consensus resulting from dialogue in the community.

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 reduced dramatically by 91%. The participation in LA21 was very broad and nearly all inhabitants are aware of the LA21 and the underlying plans. Organised environmental grassroots organisations play an important role in the LA21.

How important was participation in this reduction of consumption? Public participation has provided useful data and more information in the formulation of the respective LA21 plans while local grass root 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, part of the successes are due to the involvement of citizens in the LA21-processes. These have influenced the public's general attitudes to the environment and generated better dialogue between the citizens, stakeholders and the authority. It remains an open question what would have been possible through traditional command-and-control regulation or through "pure" market-based instruments if the municipality would have had the necessary legal and economic possibilities.

How unique is in Albertslund given the relatively large share of ‘gladiators’ among its citizens? Comparative research shows that successful pioneering sustainable communities have similar characteristics, although they may have very different roots and motives. Some of the major common characteristics (Lafferty, Coenen and Eckerberg, 1998) are:

- an active and politically mobilised population;
- interested and motivated civil servants;
- local politicians with a particular concern for environmental issues;
- positive international contacts and networks;
- existing environment-and-development initiatives.

A form of ‘critical mass’ in local-community forces seems to be necessary for socio-political mobilisation and awareness with respect to sustainable policies.

4.4 Consumer involvement in national policy making

The third example we describe here is the input of consumers in national policy making. In contrary to the other examples described here, which all refer to geographically smaller areas and therefore a more limited number of citizens, it is more difficult to image 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 (Table 2.1). Regardless of how representative citizen input in these three methods may be, still only a small number of citizens are really contributing. However, the use of new communications technology in public involvement in policy making, often referred to as digital government, can change this drastically.

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. The USDA announced its so-called National Organic Program proposed rule on the Internet on December 15, 1997. Over the next several months, the department received 275,000 comments by e-mail, fax and postal mail.

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) which assists in the development 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 board members was made up of organic farmers, handlers, retailers, and certifiers, as well as environmental experts, public or citizen’s group representatives, and one expert grounded in toxicology, ecology or biochemistry. The NOSB was appointed in 1992 and spent four 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 which 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, feed and confinement of livestock, among many others.

When the NOP’s initial proposed rule came out there appeared to be a gap between 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 their extensive public consultation were 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 had bent its ear to industry and political pressure by biotech firms, trade organisations and other related US federal departments. A research project (Shulman, 2000) analysed the responses to the NOP rule. The pilot sample of comments showed an almost unanimous rejection of the inclusion of the three controversial methods in the rule based on feared known and unknown health risks and environmental impacts associated with the processes. People also saw a mismatch between these methods and the concept of organic food and feared the intrusion of big business into the organic sector.

On March 7, 2000 a revised rule was released which had been modified in light of the 270,000 public comments. An additional 40,774 comments were received on the revised proposal, many of which were incorporated into the final rule. The USDA itself states that the commentaries 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 have been prohibited in the new rule and therefore its use in the production of all organic foods. The argument for prohibition is not scientific: the USDA states that there is no current scientific evidence that use of the excluded methods presents unacceptable risks to the environment or human health. In fact the USDA thinks that these methods not only have been approved for use in general agricultural production, they also may offer certain benefits for the environment and human health.

Despite the USDA's view of the science behind the arguments, the three methods are forbidden based on the overwhelming consumer opposition to their use in organically grown food. And this despite possible tension with other interests, such as possible difficulties for organic food processors 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 for other interests groups the USDA believes that the need to meet strong consumer expectations outweighs these concerns. With the launch of the first proposed rule secretary Glickman¹ 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."*

Discussion

We can characterise the USDA organic rule example as follows. Participation served here in the first place by increasing the legitimacy of the rule and reducing the level of conflict. The decision-making process is about the acceptance of a concept rule. All US citizens could participate. Formally the decision in the end was taken by means of representative democracy. In practice, representative democracy gave in to direct democracy because of the overwhelming opposition against the proposed rule.

Government agencies are increasingly deploying new technologies to improve citizen/government interaction in the hope that through means like the Internet this interaction becomes more open, efficient, and responsive. 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 paper copies of each comment (one file copy, one working copy and a copy for access in a public reading room). This saved USDA \$300,000 in copying costs and saved two employees from the

¹ Remarks of secretary Glickman on the proposed Organic Standards, December 15, 1997. Release No. 0443.97 <http://www.usda.gov/news/release/1997/12/0443>

tedious task of making those copies. Similarly, 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 another advantage over traditional participation methods is the ease of submitting comments, which encouraged more people than usual to participate, making USDA's National Organic Program the most open, publicly accessible rule-making the government ever ran².

Some questions can be raised about the link between media coverage and the publicity for the public input. Adversaries of this type of democratic process would also say that this kind of input underestimated the value of the disputed technologies. It could even be seen as a capitulation to citizen demand based on the unscientific will of people. However, the question is not really whether GMO-produced or irradiated food is less sustainable. The fact is that the larger public does not see it as healthy and safe food. This may be based on a wrongful fear of known and unknown health risks, but the participation process makes people able to express their own choices. For the USDA the overwhelming opposition was the key argument to ban certain methods from the rules for organic farming despite their own belief that the scientific discourse on these methods do not back this prohibition.

4.5 Users input in 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 for community involvement is that a water supply strategy involves choices that affect the lives of the members of the community. Therefore involvement of these communities in drafting a water strategy is important. 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

The community consultation process started with the launch of an issue paper 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 through the end of April 1993. Summary papers were compiled by the ACTEW on issues like education, pricing, regulation, and 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 attendees, followed by distribution of a questionnaire to test reactions and views on the facts being presented. The attendees were randomly selected using market research techniques.

These formal moments give only a limited perspective on 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;

² Gary Scavongelli, Agriculture associate deputy administrator for transportation and marketing programs, (202) 690-1305.

- ACTEW professionals were made available at convenient community venues such as the Canberra show and through static displays in shopping centres;
- Over 5000 copies of discussion documents were distributed and broad media articles on the respective issues were released in all the consultation rounds;
- Reactions were made easier by including comment sheets and pre-paid, pre-addressed envelopes in all documents.

Earlier planning had indicated that, based on projections and consumption patterns, a new dam would have been 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 at critical points in the process. ACTEW engaged a research institute to independently assess the community's acceptance of the directions and to measure community reaction as the Strategy has developed. The market research work indicated very high levels of support for the overall directions of the strategy (over 90%).

In essence, the strategy 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, more 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, 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 to focus on "how to save" aspects. ACTEW's education and awareness program 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 for 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. A further 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 environment and conservation aspects the community.

The following water conservation targets were adopted by the community as a reflection of their desire to defer the need for a new dam:

- 15% of annual per capita demand by 2000
- 25% of annual per capita demand by 2010, and
- 35% of annual per capita demand by 2020.

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 rises to an even higher level for severe droughts. And 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.

Discussion

We can characterise the ACT example as follows. Participation served here in the first place as a means to create support from the water-users for the water supply strategy and the water measures in 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. Under the influence of the public the basis for the future water policy has become controlling water demand instead of building a new dam. Simple habit changes and the use of more water efficient appliances have led to large consumption reductions. 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 maximum 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 in more severe droughts, it is expected that the need for a new dam can be deferred well beyond the 2005 date.

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 went to the daily social environment and activities of people (clubs, shopping malls, fairs) to actively involve people.

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 conditions, requirements and the contingencies for participatory decision-making. This section also identifies some areas for further research and analysis.

Participatory decision-making, consumer awareness and behaviour change

All four case examples illustrate in different ways the possibilities to link participatory decision-making with greater consumer environmental awareness and behaviour change. First of all, the participation processes raised awareness of the nature of the environmental problems related to particular patterns of consumption. In the urban transport examples a survey of the participants afterwards showed that they had more understanding for (environmental) traffic problems and their solutions and showed more support. In the ACT example the market research showed an increase in the understanding of the problems and their solutions.

Secondly, there are also signs of individual behaviour change. Most visible is the reduction of water consumption 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 great willingness to pay extra taxes for the environment is an indicator for behaviour change. In general, support for unpopular measures could be seen as a form of behaviour change. An interfering factor in the relationship between awareness and behaviour change is the economic costs to the consumers. For the ACT inhabitants a new dam would mean a rise of water costs. Consumers of organic food are expected to have to pay more than for non-organic food. Remarkably, the outcome of the participation process in Groningen is that the commuters will carry the burden of more sustainable transport. Forms of economically important transport are spared from any extra burdens.

Comparing institutional and process characteristics

We characterised all four examples on the basis of the purpose of the participation and institutionalisation factors, on the basis of the various rules (see table 2.4). Some remarks can be offered on these institutional factors and the outcome of the participation processes.

First, the scope of the participatory decision-making process, as set by the authority rules, is very important for the outcome of the process. For instance in the case of Groningen the outcome depended crucially on whether participants were to decide about transport policy as a whole or just the choice between more or less sustainable modes of transport. This means that before shaping a participation process a good consideration of the scope is crucial.

The type of information offered by the participants influences the outcome. The type of information exchanged in the examples is quite different and ranges from factual information (*e.g.* the ACT case), to an exchange of information on perceptions and norms (*e.g.* USDA's organic rule case). This

means that before shaping a participatory process a good consideration of what kind of knowledge one wants to obtain from the participants is needed. Do we want lay knowledge, for instance local information, or opinions and support? And what is seen as important in the process expert knowledge or lay knowledge?

Boundary rules determine who participate. Therefore boundary rules also determine which interest groups 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. Particularly in policies regarding sustainable development participation of a larger group could be important given equality criteria.

In section 2 we illustrated some more 'formal' participation methods from the literature. The examples are all mixes from different participation and decision methods including public hearings, surveys and consensus conferences. It illustrates that the success of participation processes does not depend on the use of a formal method of participation. However through well-documented methods from literature policy makers could be more aware of the pitfalls of participation. For instance, in the Groningen example one could have known beforehand that certain participants would drop out in the second phase of the process given the requirements of the chosen participation form.

Limits to participatory decision-making

The cases illustrate some of the potential limits to participatory decision-making that were discussed in section 2.3 of the paper. For instance, the Groningen example illustrates the tension between participatory decision-making and representative democracy. The citizens expected real influence in the decision-making and found out in the end that the final decisions were under the responsibility of the elected politicians. In the organic food case, many commentaries raised questions about the influence of the NSOB board on the proposed first rule, even if in the end the overwhelming opposition had real influence on the final outcome.

This is also related to a second issue raised in the paper, which we identified as the management of expectations of the parties involved. Participants want to have the feeling that their participation input will have consequences in decision-making. On the other hand civil servants do not always have high expectations of the value of participants' input. This is also related to the issue of expertise, especially in cases where decision-making relates to scientifically complex problems.

The case examples illustrate the potential problems with dominant actors and representatives. The dangers of overrepresentation of 'gladiators' with a certain educational background are present in all four examples. The ACT case shows one can work on representativeness through the way one approaches the public. Another problem is the overrepresentation of certain interest groups. In environmental matters this is referred to as 'green ghetto' participation. In the LA21 case, grassroots environmental actors play a dominant role. One would expect that in an internet forum process the problem of dominant actors would vanish given the pure total of reactions. An important dominant actor in this case were the media who gave room to certain opinions (*e.g.* scientists) and less to others (business interests).

Finally, the cases illustrate the problem of time and information requirements. What is remarkable in the Groningen case is that not so much the participants see the information overload as a problem as well the duration of the total process. The ACT case illustrates how a certain approach can be less demanding for citizens. The organic food rule illustrates that a relatively easy way to obtain information and react through the Internet raises the number of participants that are involved dramatically.

In the urban transport system planning process, the water strategy and the organic food rule the stakes for the consumers are clear. It's 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 these stakes for individual consumers are less clear. But through the use of the environmental latitude concept and the use of clear quantitative objectives and the monitoring of the results these 'stakes' are made visible.

For all the examples we could raise the question of what are more sustainable options? Sustainable development is not an objective criterion and often it is difficult to determine if a certain policy option is more or less sustainable. Participation can add to the definition of sustainable development. In the participation process the perception of stakeholders and citizens is part of the discussion that adds to the understanding of what is meant by sustainable development in this particular case. For instance in the NOP rule the discussion adds to the demarcation of what the general public sees as organic food. 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.

Contingencies for participatory decision-making

In this paper we have discussed the conditions, requirements and the contingencies for participatory decision-making. Throughout the paper we argue that some policy situations might be unfit for participatory decision-making. The case studies illustrate the possibilities of participatory decision-making in consumer oriented decision-making but also their disadvantages. This section further discusses policy situations for participatory decision-making in relation to those cases.

A first contingency is that participatory decision-making is less suitable for problems that require quick and decisive action. All cases show that participation is a time- and resources-consuming process. In the Albertslund case, there is a binding citizen involvement in policy making within structures overseen by elected or appointed officials. To oversee and react to all proposals before they are passed on to the municipal council, it is probably unrealistic to depend 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, which is at most a form of more direct democracy. This relates to another side of the coin. If participants have to invest time, they want real influence. Participation will decline if proposals do not find their way into "real-life" decision-making.

Further we indicate that participatory decision-making is less suitable for situations 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. However private actors can also seek participation of end-users like water consumers or work commuters in their policies, like the ACT case shows, because these companies depend as much on consumer behaviour change as governments do.

We report that participatory decision-making is less suitable for situations where there are deep-seated societal norms and ideologies that constrain a minimal willingness to compromise on normative positions. The NOP case shows even if a large part of the public has deep-seated societal norms and ideologies about what safe food is, there is willingness from the side of government to leave their normative position that the discussed methods are safe, public participation is useful. A negative consequence of participatory decision-making in situations where there are deep-seated societal norms and ideologies is that governments try to avoid the more difficult or innovative areas of sustainable consumption that touch upon social dilemmas, or restrict their interest in connecting with the citizen interest in 'here and now' instead of discussing 'there and then' in terms of global and future problems. This is especially the case in participatory decision-making where there is a broad scope of participation

issues. In these participatory processes there could be a bias towards non-controversial and positive themes and issues with a low potential level of conflict.

Further we reported that participatory decision-making is less suitable for situations where social dilemmas prevail, particularity between individual and general interest. In the Albertslund case innovative ways were used to influence business decisions, which largely depends on consumer power. One can wonder to what extent the success of this approach is due to the unique character of the Albertslund community, which since the 1970s has attracted a particular kind of resident of whom a good part happens to be environmentally conscious. In general a large part of the population remains apathetic, or merely functions as spectators. In the NOP regulation case the tensions between business interests and the interests of consumers and organic farmers are quite clear. Even the over a quarter of a million reactions is still only a fraction of the US population. And does a reaction through the Internet really mean that the consumer-citizen is fulfilling a role as a gladiator?

The ACT case illustrates the possibilities for a complex decision-making situation with a high interdependency between actors where participants cannot implement policies alone. Water demand can not be regulated without the involvement of the water user. Water use in a city could cause effects in regions far away from the city, especially through the building of environmentally damaging dams. Water savings cannot be solved by price setting alone. There is a need for individual behaviour change, which in the end means linking the effects of the consumer's own behaviour in distant places and time.

Further contingencies are related to the requirements for participation. An important requirement mentioned in the paper is the capacity that is needed from the participant in knowledge and time. Participatory decision-making is less suitable for directly involving citizens or local interest groups in abstract, strategic problems which requires a certain expert knowledge. To participate in the early stages of the planning process means that more is needed than a single response to a draft plan. Constructively commenting on proposals already asks for a variety of 'skills', and the ability to formulate alternatives and counter arguments even more. Probably the NOP case is successful because of the relatively easy way in which participants could react to the proposal.

On the other hand participatory decision-making is suitable for directly involving citizens in clear, concrete and operational problems at the local and regional level (direct participation). For instance examples in Albertslund are energy savings in public buildings, buying organic food by schools and kindergartens, growing organic food, etc. This is related to the concept of a geographical-community with a shared common interest and identity due to community size and historical roots.

Finally, participatory decision-making is thought to be suitable for directly involving experts, government representatives and (inter) national interest groups representatives in abstract strategic problems at the national and international level (indirect participation). And this is suitable for involving these stakeholders in an early, preparatory stage of policy development. This raises the question of representation. Participation seldom represents a genuine cross-section of the community. One could be worried about specific groups like minorities, the poor, youth and aged or about the lack of business involvement or the overrepresentation of environmental NGO's. This raises the issues of the tension between participatory and representative democracy.

Further research and analysis

Participatory decision-making approaches clearly have something valuable to offer. However, we should also face its disadvantages, as some situations may be less suitable for participation approaches. The list of contingencies as mentioned above already emphasised that participatory decision-making

should not be used as a stand alone 'new leading paradigm'. It is especially strong in mutual coherence with representative democracy.

We also think that policy making for sustainable consumption must still require substantive expertise. Sustainable consumption implies decisions throughout the whole life cycle of products, throughout different levels of scale (local, regional, national, international), throughout the whole decision-making process (developing and implementing of policies), throughout current and future generations of people, and in attainment with other public policies (*e.g.* transport, land-use, economy). Participation involves consumers and organisations that usually have a partial interest and task. Therefore, although different social actors (including government, industry, consumers, and environmental organisations) may share the responsibility for sustainable consumption, governments will continue to have the ultimate responsibility. In this sense, participatory decision-making must be viewed as being complementary to conventional representative decision-making mechanisms.

The importance of substantive expertise does of course not necessarily mean that only professional experts should run decision-making. It also means that the participatory process should include citizens and other groups. Their involvement, however, should not only focus on just reaching agreement. The careful exploration of good ideas and the substantive values and objectives of the participants is all-important. In this sense, as Gregory (2000) has made clear, participatory decision-making works well as an instrument to improve the insights necessary for the decisions to be made, and not just as an instrument to resolve disagreement. It is, therefore, important to not only emphasise the decision-making process, but also its potential substantive outcome. Participatory decision-making should thus be an instrument to increase the local and regional relevance of sustainable consumption decisions, to provide good comprehension and knowledge about possible consumption patterns, and - by relying on representative government - to ensure an emphasis on collective interests, long term solutions, and coherent policies.

A promising future approach in this respect is the integrated product policy (IPP) raised by the EU Environmental Council in 1999. IPP intends to cover all conditions of production as well as consumption and their environmental effects by taking a life-cycle perspective as a lead principle. An integrated product policy avoids shifting environmental problems between different media and stages of a product's life cycle. The IPP is a framework for linking voluntary and mandatory measures. Crucial is the co-operation and improved communication between policy formulation to implementation. Consumers play an important role in the IPP and can adapt their actions to the principle of sustainable development together with the companies, institutions of different kinds and the government (European Commission, 2001).

Finally, since the experiences with participatory decision-making in sustainable consumption policy are scarce, more experiments are required. This would provide participatory decision-making with a more adequate testing field. Currently, an opportunity to test and experiment with a participatory approach within the sustainable consumption field is largely lacking. It is important to bear in mind the careful merging of these kinds of experiments within representative decision-making structures. This is important because sustainable consumption requires decisions that often go beyond the scope of the participants that are usually active in participatory decision-making processes. It is also important simply because participatory processes may easily end up as meaningless without the representative decision-making powers to formalise the agreements that are made.

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