

IMPROVING THE PRACTICE OF PUBLIC PARTICIPATION IN ENVIRONMENTAL PLANNING AND DECISION-MAKING IN SOUTH AFRICA

Merle Sowman

Senior Researcher
Environmental Evaluation Unit
University of Cape Town

Manuscript accepted November 1993

Despite calls for greater public participation in all aspects of environmental planning, assessment and decision-making, opportunities for participation in the planning, legal and administrative systems governing these activities are limited. Furthermore, there is little information and guidance on how this may be achieved in practice. The emphasis of this article is there-

fore, to suggest ways of making public participation operational. It begins by defining the concept of public participation and explores how the principles and tasks of participation may be integrated into the environmental planning process. It proposes a public participation process which indicates when, how, why and to what extent

the public should be involved in the activities of environmental planning and decision-making. Adoption of the principles of public participation, and the application of the process outlined in the article, should contribute to improving the practice of public participation.

INTRODUCTION

A common theme throughout the planning and environmental impact assessment literature is the need for greater public participation in all aspects of planning, environmental assessment and decision-making (Hollnsteiner 1976; Hudspeth 1982; Potter 1985; Canter *et al.* 1988; FEARO 1988; Burdge and Robertson; Yap 1990). The rationale behind this call for public participation is the philosophy that in a democratic society, ordinary people should have the maximum opportunity to participate in actions and decisions which affect their lives. Yet the value and advantages of public participation go well beyond serving democratic goals.

In terms of furthering the goals of environmental planning, the key values of greater public participation are considered to be threefold. Firstly, it provides valuable information and insights into local conditions, as well as community needs, values and preferences. Secondly, broad participation throughout the planning process facilitates implementation of plans. Decisions based upon plans which have been generated by the people and which are reflective of community needs, values and concerns and take cognisance of environmental factors,

are more likely to be considered legitimate, and thus supported by the people. Furthermore, the accountability of decision-makers is likely to be reinforced if the process is open to public scrutiny (Hudspeth 1982). Thirdly, and possibly most importantly, participation in activities and decisions which directly impinge upon one's life, develops a sense of self-worth, responsibility and empowerment. Where participation is genuinely mass-based, it can contribute to increasing a community's self reliance and capacity (Hollnsteiner 1976; Moser 1989), and strengthen social cohesion.

While most public participation theorists recognise that there are problems associated with following a participatory approach (Hollnsteiner 1976; Canter 1977; Kent 1981; Hudspeth 1982; Potter 1985), the advantages - in particular the increased likelihood of gaining the support of the public - far outweigh these potential problems. In fact, experience has shown that failure to involve the public from the initial stages of project planning may lead to protracted decisions and delays in project implementation (Gawith *in prep*; CSIR Environmental Services 1993) and even court action (Sowman 1991), resulting in increased costs to the project proponent.

Despite the clear arguments for supporting public participation in all aspects of planning, there are several obstacles to its implementation. One of the major factors inhibiting a participatory approach to environmental planning and decision-making has been the undemocratic, technocratic and secretive style of government characteristic of many developing countries, including South Africa. Furthermore, this style of government has nurtured an elitist approach to planning (Sowman and Gawith *in press*), which advocates that those who are best qualified and technically most knowledgeable should be responsible for making societal decisions (Hollnsteiner 1976; Hudspeth 1982). This practice of planning for the people rather than with the people has restricted access to the planning process.

Some would argue that it would be foolish to advocate participatory planning where citizens do not have access to the decision-making process since it could lead to frustration (Kent 1981), or even violence (Moser 1989). However, evidence of the enormous power of public pressure to influence decisions and alter traditional processes suggests that decision-makers can no longer afford to exclude the public from planning and decision-making processes. In fact, these growing

demands for active involvement have forced decision-makers and professionals to seek creative means of providing increased opportunities for public involvement in the various stages of planning.

Parallel to this call for greater public participation in South Africa, has been a rise in environmental consciousness and a recognition of the detrimental effects of actions and decisions taken by politicians and administrative authorities on behalf of the public (Cock and Koch 1991; Ramphele 1991). Greater concern for environmental quality has led to increased questioning by the public and demands for access to information and participation in all aspects of environmental decision-making. There has been a concomitant rise in the number of Non-Governmental Organisations (NGOs) concerned with environment and development issues (Khan 1990; HAP Organisational Development Services 1993) and significant increases in the membership of such groups. This has facilitated the organisation of individuals and groups with similar interests or problems and thus given a stronger voice and greater representation. These events have forced the planning professionals and government departments to afford the public greater access to the planning process.

However, whilst the principles of public participation appear to have been acknowledged in both developed and developing countries, the operationalisation of public participation is still relatively recent and needs to be further developed, implemented and evaluated. The central concern of this article is, therefore, to suggest ways of broadening the scope and improving the practice of public participation in environmental planning and decision-making in South Africa. The article begins by defining the concept and principles of public participation. It then briefly examines existing opportunities for participation in the legal and administrative system governing planning, environmental assessment and decision-making in South Africa. Suggestions as to how public participation may be better integrated into the environmental planning process are put forward. The role of the public, as well as the tasks of participation at each stage of the planning process, are

outlined. Finally, a list of key techniques for facilitating public participation and an evaluation of their effectiveness, is given.

DEFINITION AND PRINCIPLES OF PUBLIC PARTICIPATION

In South Africa the term public participation means different things to different people. Amongst certain technocrats, the existence of appointed bodies - such as the President's Council and Council for the Environment - through which the concerns of the public may reach policy and decision-makers, is considered a form of participation. To others, the notice-and-comment procedures, as required by certain legislation, such as the Land-Use and Town Planning Ordinances of the Provinces, provide adequate opportunity for the public to voice their objections. As far as the environmentally literate (mostly white elite) are concerned, public participation is a two-way communication process involving the exchange of information throughout the planning process, and the integration of the views of the public in the decision-making process (D Wilson, pers comm. Peninsula Mountain Forum). For those who are fighting for participatory democracy in South Africa, participation means citizen direction and control of the planning and decision-making process.

These various forms and levels of participation can be located somewhere on a continuum of participation categories varying from very constricted forms of participation through to various forms of joint decision-making and citizen control (see for example Arnstein 1969; Canter *et al.* 1988; Connor 1988; FEARO 1988).

Whilst the ultimate goal of public participation may be the transfer of decision-making power to the public (Hollnsteiner 1976; Kent 1981), we need to develop a working definition which reflects the needs and expectations of the people, but is also realistic and generally acceptable. In the context of environmental planning and decision-making, the following definition and set of principles is proposed. Public participation is:

1. an iterative, on-going communica-

tion process between an informed public and the professional team concerning the conceptualisation, development, assessment and decision-making of alternative proposals which affect the environment; and

2. a commitment by the participants (that is the public, professional team and decision-making authorities) to adhere to the agreed upon process and the outcome of that process.

The second part of this definition is critical during this transitional phase in South Africa, since it does not bind the participants to the traditional decision-making procedures, but to decision processes determined and agreed upon by all the participants at the outset of the planning exercise.

The key principles underpinning this definition are the following:

- citizens have a fundamental right to become actively involved in the determination and outcome of any proposal affecting their lives and future;
- involvement of all interested and affected parties, including NGOs, citizen groups, and government departments, should be actively sought and nurtured throughout the process;
- public involvement should commence at the initial stages of plan formulation and continue throughout all stages to implementation and monitoring;
- there must be free and open access to information throughout the process;
- participants must agree on an appropriate plan formulation and decision-making process, of which the public involvement programme constitutes an integral component;
- there needs to be a commitment by the various participants to the outcome of the process (so that no one group can override the final plans derived at through a participatory exercise);

- mechanisms, such as appeal procedures for objecting to decisions taken which are not consistent with agreed upon procedures, must be set in place; and
- there must be distribution of information, resources and development of skills to facilitate equitable participation of all affected parties.

EXISTING OPPORTUNITIES FOR PUBLIC PARTICIPATION IN ENVIRONMENTAL PLANNING AND DECISION-MAKING IN SOUTH AFRICA

In this section, a brief review of the opportunities for public participation in legislative enactments and the administrative system governing environmental planning and decision-making, is given. The potential for achieving a measure of public participation through the establishment of informal arrangements between administrative authorities and the public, is explored. Since the form and level of participation discussed below is very restricted, the terms public input, comments, objections, appeal and review have been used to indicate the particular type of participation usually called for at the different stages of the planning process.

Provisions in Legislation for Public Participation

In general terms, opportunities for public participation in key legislative enactments and provincial ordinances concerned with economic development, planning and environmental conservation, are limited to notice-and-comment procedures, written or oral representations, hearings and appeal procedures.

Before turning to the relevant acts and ordinances, it is pertinent here to comment on the opportunity for public input in the preparation of parliamentary legislation and provincial ordinances. There is no constitutional requirement that all proposed legislation be published for comment before promulgation. Thus, it is interesting to note that certain recently promulgated key laws, relevant to land use plan-

ning, development and environmental conservation, most notably the Environment Conservation Act 73 of 1989, the Physical Planning Act 125 of 1991 and the Cape Land-Use Planning Ordinance 15 of 1985, have all been published for general information and comment prior to publication. Changes to the legislation have occurred as a result of input received from the public and authorities. However, there is no legal requirement that the public comments and concerns submitted be addressed when revising the draft legislation.

The Environment Conservation Act 73 of 1989, in particular, was preceded by extensive deliberations and ample opportunity for public comment (Rabie 1990). The Act itself, also provides several opportunities for public input, mostly in the form of notice-and-comment requirements [see for example, section 32 (1) and (2)]. In fact, Rabie (Fuggle and Rabie 1992) believes that Act 73 of 1989 provides greater opportunities for public comment and representation, in terms of administrative decision-making, than any other legislation. However, a major shortcoming of these provisions is that the Act does not specifically require the relevant administrative authority to take account of the comments and/or objections received in the decision-making process. The only exception to this is Section 23 (4) which requires that all representations received, in terms of the declaration of a Limited Development Area, be considered.

A further opportunity for the public to gain access to the decision-making process is afforded in Section 36 (1) and (2), which enables any person whose interests are affected by an administrative decision made in terms of this Act, to request the administrative body concerned to furnish reasons for the decision. Furthermore, the Act makes provision for the applicant to apply to a division of the Supreme Court to review the decision once such reasons have been provided, or if the administrative body fails to furnish reasons, within a stipulated time period.

What limits the benefits of these enhanced opportunities for public input is the Acts restrictive *locus standi* requirement which limits 'par-

ticipation' to those persons (such as property owners and developers) whose individual interests have been directly affected by an administrative decision. A further criticism of the Act, and which is contrary to participatory principles, is the enormous powers vested in the Minister and other delegated authorities. Thus leaving ultimate control of environmental matters in the hands of the executive (Fuggle and Rabie 1992).

The new Physical Planning Act 125 of 1991, unlike its predecessor, the Physical Planning Act 88 of 1967, contains extensive provisions for the public to provide input at particular stages of the planning process. This includes provisions for the public to submit written proposals for inclusion in draft plans, to comment on draft plans, to inspect policy plans, to be informed of investigations into a particular matter, to make application to the planning authority to amend a policy plan, and to review final plans [see sections 9, 10 (2), 11 (1) (2), 14, 15, 18, 19 and 20)]. The requirement that proposals and comments from the public be considered by a planning committee prior to preparation of a draft plan [see section 10 (1)] and by the planning authority prior to approving a plan [see section 15 (2)], means that public concerns and input will be considered in plan formulation. Furthermore, failure to do so would strengthen the public's case should a decision to proceed with a plan be challenged in a court of law.

Surprisingly, the section dealing with urban structure plans contains no clear provisions for public participation, although an administrator may provide such opportunities in regulations dealing with the manner in which an urban structure plan is required to be prepared [see section 26 (1)].

Whilst several sections of the Act provide opportunity for public input in the plan preparation process, the effectiveness of the type of participation afforded in the Act is extremely limited. Firstly, the members of the planning committees, who are responsible for the preparation of plans, as well as the investigating committees, are appointed by the planning authority. There is no requirement that representatives of the public or com-

munities whose interests may be affected by the plans, serve on these committees. Consultation with members of the public is usually at the discretion of the planning authority, as is the approval, amendment, review and withdrawal of policy plans.

Finally, methods of notifying the public of opportunities to comment or submit representations are extremely limited since the notices informing people of this opportunity are either published in the government gazette, and/or in an Afrikaans and English newspaper circulating in the area. This limited notification procedure effectively restricts input to those who are literate, fluent in either English or Afrikaans, and who have the resources to obtain the newspaper or gazette. Furthermore, even if persons or communities affected by a plan were notified of an opportunity to comment on a draft plan, via other means such as radio, or notices displayed in the community, only few would have the knowledge and skills to review the document and plans, and be able to comment from an informed position (Sowman and Gawith *in press*).

A review of the various provincial town and land-use planning ordinances, reveals that various provisions exist for limited public participation. These include opportunities to:

1. comment on draft plans;
2. submit written representations or objections in the case of new or amended town planning schemes, the establishment of townships, rezoning and subdivision applications; and
3. appeal against decisions.

It would appear that the Natal Town Planning Ordinance 27 of 1949 offers broader scope for public input and comment, since provisions exist for hearings and public meetings to be held, broad advertising of proposals and invitations to comment, as well as the serving of notices on persons directly affected by a plan or development application. However, these participatory provisions are limited in scope, since the extent of their application is often left to the discretion of the Town and Regional Planning

Commission (T&RPC), which is mainly concerned with efficiency considerations, and has time constraints and limited resources. Furthermore, the decisions made by Natal T&RPC are subject to the approval by the Executive Council of the Natal Provincial Administration. This is a politically appointed Council who do not have to furnish reasons for their decisions.

The adequacy and effectiveness of these various provisions in achieving the goals of public participation are generally very limited, since they are mainly concerned with providing the public (and mostly only a limited public) with an opportunity to comment on plans which have been formulated, approved and implemented by others.

There are various other acts and ordinances which deal with activities and matters which clearly have implications for environmental planning such as the Minerals Act 50 of 1991, the State Land Disposal Act 48 of 1961, the Less Formal Townships Establishment Act 113 of 1991 and the Subdivision of Agricultural Land Act 70 of 1970, to name but a few. A broad-brush review of these and other relevant pieces of legislation, indicated that provisions for public participation are either severely restricted or non-existent.

Opportunities within the Existing Administrative System for Public Participation

According to Schwella and Muller (1992), except for the appointed councils and statutory bodies - which in terms of the various public participation typologies would be considered a form of non-participation (Arnstein 1969; Connor 1988; FEARO 1988) - there are few formal institutionalised opportunities for real participation by the public in environmental management decisions. In fact, the system of Apartheid has resulted in an extremely complex and cumbersome administrative system characterised by bureaucratic, secretive and technocratic procedures and approaches, as well as the granting of excessive powers to government officials who are not accountable for decisions taken. Fur-

thermore, many government officials still regard the involvement of the public in administrative activities and decision-making as being undesirable, since it may result in project delays and increased costs. These characteristics and attitudes are contradictory to the principles of participation. It is therefore inevitable that until the style of government changes, opportunities for real participation in public administration will not be formally required.

Many authors would argue that the concept of public participation, in the form of the principles of natural justice, is implicit in administrative law - a branch of law concerned with the administrative process itself and the judicial control of that process (Baxter 1984; Baxter and Milton 1986; Fuggle and Rabie 1983; Little 1989). The principles of natural justice require that any person who is disadvantaged by an administrative action should be given a fair and impartial hearing by a court of law before the action contemplated is taken (Baxter 1984). However, since this remedy is usually invoked once a decision has been taken, it falls short of meeting the goals of participation and acts merely as a form of external control of administrative actions. Furthermore, as far as serving the public and environmental interest is concerned, the review process is severely restricted since the courts can adjudicate only on the validity and legality of actions taken (Fuggle and Rabie 1992), and cannot consider the substantive correctness of decisions taken. It is the merits of a decision that are usually the concern of the public.

The most serious shortcoming of this remedy is, however, the extremely limited interpretation of the *locus standi* requirement. This immediately limits access to the courts to those persons who can demonstrate a direct, personal and sufficient interest in the action concerned (Baxter 1984). For this remedy even to be considered a form of public participation the *locus standi* requirement would need to be significantly liberalised.

A remedy which affords the public an opportunity to challenge the merits of an administrative decision is known as appeal. Appeals can be made either to a court of law or to a designated

administrative body. However, this remedy can only be employed if provision for appeal exists in the legislation. In the case of appeal to the executive, the legislation usually makes provision for appeal to a higher level of authority in the same administrative hierarchy (Fuggle and Rabie 1992). For example, provision exist in the Natal Town Planning Ordinance 27 of 1949 for an aggrieved person to appeal to the Town Planning Appeals Board against a decision (see Sections 67 and 73). Once again, the interpretation of aggrieved person may be narrowly interpreted, limiting the effectiveness of this remedy to the general public.

Opportunities Provided by Informal Arrangements and Agreements

One of the more effective means of obtaining public participation in administrative actions and decisions, is through establishing informal arrangements and agreements between administrative authorities and the public. Community organisations such as Ratepayers' and Civic Associations (committees that are representative of communities and stakeholders in a particular area or affected by a particular proposal), as well as community advisory groups, are the kinds of structures that have been set in place to provide a forum where policy, planning and development-related issues affecting the environment may be discussed, negotiated and resolved.

Over time, procedures for ensuring that the public provides input to the planning and decision-making process are likely to develop as it becomes increasingly recognised as necessary and desirable by both the decision-making authorities and the affected communities. One such example is the Development Sub-committee of the Hout Bay Ratepayers' Association - a resident's advisory group comprising a multi-disciplinary team of professionals, including planners, architects, engineers, environmentalists, social scientists, estate agents and developers. Before any planning or development proposals for the Hout Bay local area are approved or rejected by the Western Cape Regional Services Council (WCRSC), the local authority for the area, they are sub-

mitted to the Development Sub-committee for consideration and review. Members of the Sub-committee will usually make recommendations to the WCRSC after they have reviewed the application, visited the site and, where necessary conducted their own investigations. This Sub-committee then reports to the Executive Committee of the Hout Bay Ratepayers' Association, which also provides comments. In the case of controversial proposals, a public meeting is usually held. Although this approach tends to encourage proponents to incorporate environmental and community concerns throughout the planning process, the Sub-committee may recommend that an environmental impact assessment (EIA) be undertaken for proposals that are likely to result in significant impacts.

This Sub-committee has also prepared a set of guidelines for developers indicating the type of information that should be provided with an application, and encouraging them to meet with the Sub-committee members prior to developing their proposals. The purpose of these initial meetings is to identify issues of concern to the community, environmental constraints associated with the proposal, reasonable alternatives as well as the kinds of trade-offs that would be acceptable to the community. The WCRSC routinely refers all potential developers and applications to the Sub-committee and is guided by the recommendations of the Sub-committee when making decisions.

The purpose of providing this detailed description of the composition and *modus operandi* of the Development Sub-committee is not to set it up as a model structure for public participation - for that it is not. Rather, it serves to illustrate the kind of informal arrangements and agreements that exist between administrative authorities and the public. The effectiveness of such informal arrangements depend to a large extent on the attitudes of individual officials and government departments to public participation, as well as the capacity of the public to organise themselves and constructively contribute to decisions which affect their lives.

What is evident from this brief review

is that, whilst certain legislative provisions, administrative procedures and informal arrangements exist which require some form of public participation, they are extremely restricted in terms of who participates, the nature and method of participation and at what stage of the planning and decision-making process participation occurs.

A PROPOSED PUBLIC PARTICIPATION PROCESS

Although the literature abounds with calls for increased public participation in all aspects of planning, environmental assessment and decision-making, information and guidance on the means by which this may be operationalised, is scant. A key message to emerge is that the process of planning is as important as, if not more important than, the outcome (Kent 1981; Committee of Urban Transport Authorities 1990; Kraybill 1992). Involving the public in all stages of the planning process creates a climate of trust, ownership and legitimacy. This includes involving the public in determining an appropriate planning process for the particular project, designing a public involvement programme, as well as identifying appropriate structures to guide and support the process. Under these conditions, the public will be more willing to leave the technical details and design to experts.

In the final two sections of this article, an attempt is made to show how this increased participation may be achieved in practice. It proposes a public participation process indicating:

- when, or at what stage of the planning process, participation is required;
- how, or the means by which, public participation may be achieved; and
- why, or for what purpose the public should be involved in the activities of environmental planning and decision-making.

Before turning to examine how the dynamics of a participatory process

may be achieved in reality, it is necessary to clarify and define the environmental planning process. From the literature there appears to be a degree of consensus about the nature of plan-making and the key stages in the planning process (Wood 1988; Committee of Urban Transport Authorities 1990). These key stages are diagrammatically represented in Figure 1. Environment goals and considerations

are often either explicit or implicit to this planning process (Whitaker 1984; Wood 1988; Armour 1990). However, the failure of planning to adequately address environmental issues was one of the reasons for the introduction of EIA, an activity designed to identify, assess and communicate the environmental consequences arising from any proposed policy, programme, plan or project. Ultimately both activities are

concerned with the appropriate allocation, use and development of resources to create better living environments and so enhance the quality of life.

Given the complementarity between the goals of EIA and planning, academics and practitioners are calling for the integration of these two processes, rather than undertaking an EIA as a separate activity (Whitaker 1984;

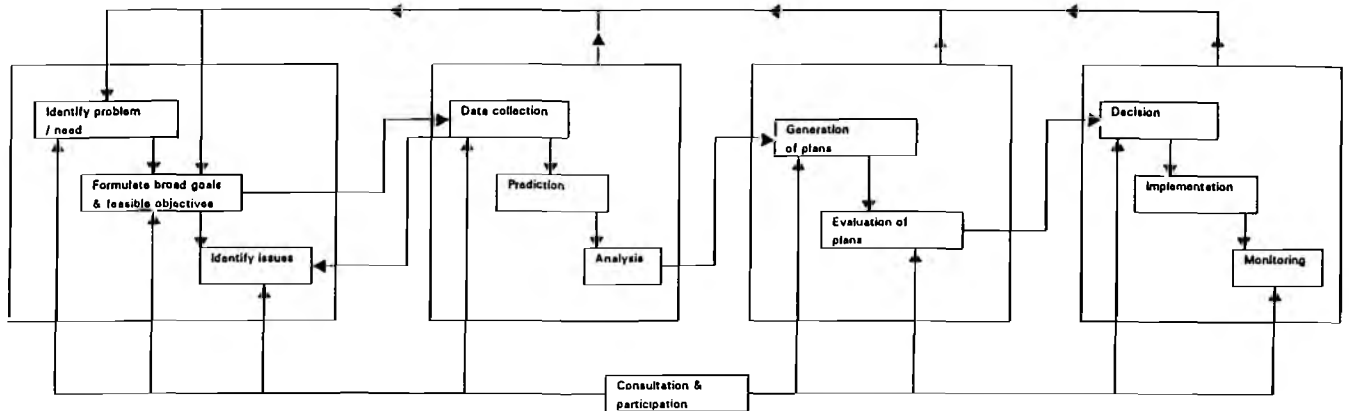


FIGURE 1: Key stages in the plan-making process (Adapted from Wood, C in Wathern ed. 1988).

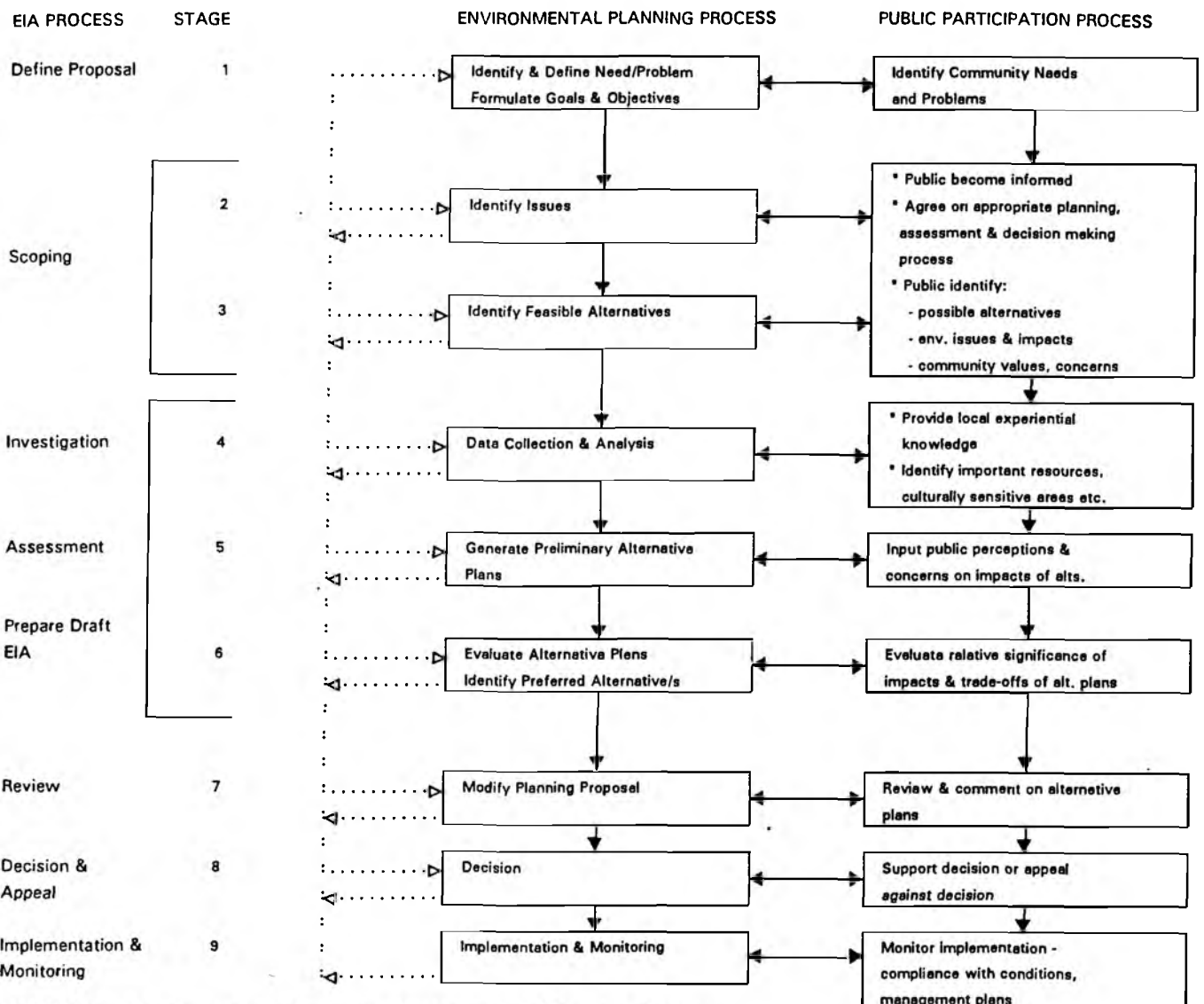


FIGURE 2: Public participation in the Environmental Planning Process.

Wood 1988; Fuggle 1990; Armour 1990; Brown 1990). Worldwide, the thinking and trend is to merge the activities of EIA and planning - hence the term environmental planning. Certainly, the recently developed Integrated Environmental Management (IEM) system (Department of Environment Affairs 1992; Sowman *et al. in press*) seeks to facilitate the merging of these two processes, although IEM tends to place more emphasis on the assessment stage of environmental planning.

Whilst many environmentalists in South Africa would argue that existing planning procedures and approaches fall short of EIA requirements (Retief and Bosman 1984; Sowman 1988; 1991; Preston 1993), for the purposes of this article we will assume a greater commitment to the incorporation of the principles and activities of EIA in plan-making than is actually the case. Hence the use of the term environmental planning in this article.

A more detailed examination of the various stages of the environmental planning process (see Figure 2) allows one to consider at what stage, in what way and for what purpose the public may be more involved in the environmental planning and decision-making process. Figure 2 provides a detailed step-by-step account of the environmental planning process. The typical stages in the EIA process which would parallel the planning process, are also indicated. A brief description of the nature and tasks of public involvement at each stage of the environmental planning process is provided.

In summary, public participation begins at the problem identification stage (refer Figure 2, Stage 1). The problem or need requiring a planning solution may be identified by the public or an authority. Where a problem or need has been identified by the authorities or politician, the public should participate in clarifying the nature of the problem, and together with the planners and authorities, produce a broadly accepted definition of the problem. One of the first tasks for the public would be to assist with the identification of broad goals and specific objectives for the planning exercise. It is likely that these goals would be reworked and refined in the

course of the planning process.

During stages 2 and 3 of the environmental planning process (Figure 2), the public, together with the planning team would determine an appropriate environmental planning and decision-making process to address the particular problem under consideration. This would include the development and design of a public involvement programme. It is likely that at this point, a representative group of people would only be mandated to deal with most of the public participation tasks and the broader public would only be involved as determined by the agreed process. Other key tasks for the public during Stages 2 and 3 would be the identification of possible alternatives, the identification of issues and environmental impacts, as well as community values and concerns requiring consideration and investigation. Access to information as well as appropriate dissemination and communication of information to the public is fundamental to such a participatory process.

The role of the public during Stage 4 of the environmental planning process is to provide local information and experiential knowledge, and identify important resources and features, as well as environmentally and culturally sensitive areas and issues. The local public could also assist in predicting future conditions with and without the planning intervention. During Stage 5, obtaining information on public perceptions and concerns regarding the anticipated positive and negative impacts associated with the proposed alternatives will assist planners with the generation of preliminary alternative plans.

The next task for the public would be to assist in the evaluation of the alternative plans (refer Stage 6). By using appropriate evaluation methods, the public should be asked to evaluate the relative significance of the impacts and trade-offs associated with the various plans. The public's input here should significantly influence the identification of the preferred plan.

The public should then be given an opportunity to review and comment on the draft plans and documents, which may include an EIA report (see Stage 7). By addressing and incorporating

relevant public comments, the plans and documents will be modified and the final plans drafted. Should the public be involved in the process as outlined above, it is likely that at this stage a preferred plan will be readily identifiable and that the decision, however derived, will be the logical outcome of the process. Detailed design of approved and supported plans would then follow (see Stage 8). However, should a decision be imposed which does not reflect the decision arrived at through the described participatory process, the public could then appeal against the decision.


Finally, the public's involvement during and after implementation of the plans would be to monitor the implementation phase and ensure compliance with any conditions imposed, adherence to management or rehabilitation plans and to provide feedback (see Stage 9).

Whilst Figure 2 suggests that the environmental planning process follows a logical sequence, in practice this process represents a series of iterative steps involving feedback as new information and insights are obtained, giving rise to modified plans and the possible consideration of additional alternatives. In addition, active involvement of the public from the initial stage of problem identification and plan conception may result in a different sequence of steps which they consider to be more appropriate for the resolution of an identified problem or need. The public participation process outlined above may create the impression of providing excessive opportunities for public involvement in every aspect and activity of environmental planning. However, it must be stressed that the nature and extent of public participation will be determined by the process that is agreed upon by the public at the outset of the exercise. In practice, it is likely that most of the negotiations will take place with a group of people representing interested and affected public, and involvement of the general public will be limited to stages such as the review process.

The process proposed above is merely a guide which the public, professionals and authorities can use to assist in designing a public participation programme to suit their particular circum-

Table 1: Participation Techniques

TECHNIQUES	AUDIENCE SIZE	EXPERTISE REQUIRED	RESOURCES REQUIRED	INFORMATION EXCHANGE	EDUCATION POTENTIAL	PROBLEM SOLVING VALUE	ISSUE IDENTIFICATION	PERFORMANCE WITH DIVERSE GROUPS	PERFORMANCE WITH DISADVANTAGED GRPS	FACILITATES EMPOWERMENT
MEDIA ADVERTISING	large	medium	medium	low	medium	low	low	low	low	low
EXHIBITS/ DISPLAYS	medium to large	low	medium to high	low	low to medium	low	low	low to medium	low to medium	low
WRITTEN INFORMATION	medium to large	medium to high	medium	medium	medium to high	low	low	medium	low to medium	low
PHONE LINES	large	medium	low	medium	medium	low	low	medium	low	low
OPEN HOUSE	large	medium	medium to high	high	high	low to medium	medium	medium	low	low
FIELD OFFICE / SITE VISIT	medium	low to medium	medium	medium to high	medium to high	low to medium	medium	medium	medium	low
PUBLIC MEETINGS	large	medium	low to medium	low to medium	low	low	medium to high	low	low	low
SURVEYS	small to large	high	medium to high	medium	medium	low to medium	medium to high	medium	low to medium	low
DELPHI / NOMINAL GROUP TECHNIQUE	medium	medium to high	medium	medium	medium to high	medium	high	medium	low	medium
WORKSHOP / SMALL GROUP DISCUSSIONS	medium to large	high	medium	high	high	medium to high	high	high	high	high
ADVISORY / TASK GROUPS	small	high	medium	high	high	high	high	medium	medium	medium
CHARRETTES	medium	medium	medium	high	medium to high	high	high	medium	unknown	medium
ARBITRATION / MEDIATION	small to medium	high	medium	high	medium to high	high	medium to high	medium to high	medium	medium to high
NEGOTIATION	medium	high	medium	high	high	high	high	high	high	high

Increasing levels of participation 

stances.

METHODS AND TECHNIQUES FOR FACILITATING PUBLIC PARTICIPATION

The previous section provided some guidance on how to incorporate public participation throughout the environmental planning and decision-making process. In this final section, a brief discussion on, and summary of, the methods and techniques that can be employed to achieve the tasks of public participation at the various stages of planning is provided. From a literature review and from experience it is clear that there is no one method or technique that is adequate and effective for the variety of tasks required of a participatory process.

Furthermore, the choice of methods used would depend on several factors, such as the degree of homogeneity amongst interested and affected communities (see Department of Environment Affairs 1992), as well as the capability of the method to perform the task set for it. For example, in the review stage, under certain circumstances it may be appropriate to

advertise in local newspapers that draft plans and documents are available in the local library for scrutiny and comment. However, in other situations, where for example the public includes poor and illiterate people, it may be more appropriate to hold a series of workshops in the community to discuss the draft planning proposals (which ideally would have been derived from the communities inputs thus far), and obtain comments.

Given the numerous papers, manuals and guidelines which provide information on the various methods and techniques of public participation as well as their strengths and limitations (Creighton and Delli Priscoli 1983; Connor 1985; Potter 1985; FEARO 1988; Committee of Urban Transport Authorities 1990; Department of Environment Affairs 1992), only a summary of the most widely used methods are provided in Table 1 of this article. An indication of the utility and effectiveness of these methods in terms of certain evaluation criteria - such as problem solving ability or the amount of resources required - is also tabulated (see Table 1). These evaluation criteria are defined more fully in Table 2 and have been developed from

those used to evaluate selected participation techniques proposed for the Canadian scoping system (Ministry of the Environment, Ontario 1985). An earlier version of this table can be found in the IEM scoping guidelines (Department of Environment Affairs 1992)¹.

The selection of an appropriate participation technique for the particular stage in the planning process is a matter of judgment which is made easier with experience. However, once the 'public' have been identified and invited to participate in the process (using whichever method(s) is/are considered most appropriate for this task), the participants themselves can assist in identifying which techniques would be most appropriate for which 'publics', for what tasks and at what stage of the environmental planning process. The development and documentation of case study material which reports on public involvement methods employed and their strengths and limitations, would greatly contribute to improving the practice of public participation in environmental planning and decision-making.

CONCLUSIONS

Despite the recognition of the values and advantages of public participation worldwide, there is little guidance on when, how, for what purpose and to what extent the public should be involved in the environmental planning and decision-making process. South Africa, with its history of Apartheid, has been particularly slow to create opportunities and implement procedures for public participation in this field. However, the trend towards participatory democracy in South Africa will require responses from planning professionals, environmentalists and those in decision-making positions, which are indicative of an open and participatory approach.

Having defined the concept and discussed the principles underpinning public participation, this article presents a public participation process which parallels the environmental planning process. It provides guidance on how to determine the nature and extent of public involvement, what tasks the public should be involved in

Table 2: Evaluation Criteria for Table 1

Audience Size	Small 1-15; Medium 16-50; Large 51 +;
Expertise Required	Skills required by the proponent/consultant to facilitate participation - such as facilitation and group interaction skills, questionnaire design experience etc.;
Resources Required	Resources such as time, person power and funds required to achieve participation objectives;
Information Exchange	The potential for information exchange and public input into the various stages of proposal planning, assessment and implementation;
Education Potential	The potential to raise the level of awareness and understanding of issues, impacts and concerns, amongst all participants;
Issue Identification	Potential to identify contentious and significant issues associated with the proposal;
Problem Solving Value	The potential to resolve problems and assist in the resolution of outstanding issues;
Performance with Diverse groups	Ability for information exchange where diverse communities are involved;
Performance with Disadvantaged Groups	Ability to involve representative members from disadvantaged communities;
Facilitates Empowerment	Potential to develop a sense of responsibility, self-reliance and empowerment.

at each stage of the planning and decision-making process, as well as the suite of methods available to facilitate such a participatory process.

Whilst the nature and extent of public participation will vary from project to project, it is crucial that the public be integrally involved in determining and designing the public involvement

programme at the outset of the planning process. Such a participatory process has a high probability of success since it provides a better information base, creates a sense of ownership, trust and control amongst those affected by the proposal, promotes perceptions of equity, legitimises the decision-making process and encourages accountability.

ACKNOWLEDGEMENTS

The author expresses sincere thanks to S Fowkes, L Greeff, J Glazewski and G Preston for their valuable comments on the draft manuscript. I am especially grateful to L Greeff for assistance given in preparing the final document.

NOTES

1. The author was one of the researches involved in developing the IEM procedure and preparing the Scoping Guidelines.

REFERENCES

- ARMOUR A (1990). 'Integrating impact assessment in the planning process: From rhetoric to reality?' *Impact Assessment Bulletin* 8, 3-14.
- ARNSTEIN SR (1969). 'A ladder of citizen participation', *Journal of the American Institute of Planners* 35(1), 216-224.
- BAXTER L (1984). *Administrative Law*, Cape Town, Juta & Co.
- BAXTER LG & MILTON JRL (1986). *Planning in the coastal zone. Resource evaluation and protection: Property, criminal and administrative law perspectives*, Pietermaritzburg, School of Law, University of Natal.
- BROWN AL (1990). 'Environmental impact assessment in a development context', *Environmental Impact Assessment Review* 10 (1/2), 135-143.
- BURDGE RJ & ROBERTSON RA (1990). 'Social impact assessment and the public involvement process', *Environmental Impact Assessment Review* 10(1/2), 81-90.
- CANTER D, KRAMPEN M & STEAD D eds. (1988). *New Directions in Environmental Participation*, Aldershot, UK, Avebury.
- CANTER LW (1977). *Environmental Impact Assessment*, New York, McGraw-Hill Book Company.
- COCK J & KOCH E (1991). *Going Green: People, Politics and the Environment*, Cape Town, Oxford University Press.
- Committee of Urban Transport Authorities (1990). *Public Participation in Land Use/Transport Planning*. Draft UTG 11, Pretoria, South Africa.
- CONNOR DM ed. (1985). *Constructive Citizen Participation, A Resource Book*, Victoria, British Columbia, Development Press.
- CONNOR DM (1988). 'A new ladder of citizen participation', *National Civic Review* 77(3), 249-257.
- CREIGHTON JL & DELLI PRISCOLI J eds. (1983). *Public Involvement Techniques: A Reader of Ten Years Experience at the Institute for Water Resources*, IWR Report 82-R1, Fort Belvoir, Virginia, USA Army Corps of Engineers' Institute for Water Resources.
- CSIR Environmental Services (1993). *Environmental Impact Assessment, Eastern Shores of Lake St Lucia (Kingsa/Tojan Lease Area)* Vol 3, Environmental Impact Report, Pretoria, CSIR.
- Department of Environment Affairs (1992). *The Integrated Environmental Management Process*, Documents 1 to 6, Pretoria, DEA.
- FEARO (Federal Environment Assessment Review Office) (1988). *Manual on Public Involvement in Environmental Assessment: Planning and Implementing Public Involvement Programs*, Alberta, Canada, Praxis.
- FUGGLE RF (1990). 'Integrated environmental management: An appropriate approach to environmental concerns in developing countries', *Impact Assessment Bulletin* 8, 31-46.
- FUGGLE RF & RABIE MA eds. (1983). *Environmental Concerns in South Africa: Technical and Legal Perspectives*, Cape Town, Juta & Co.
- FUGGLE RF & RABIE MA eds. (1992). *Environmental Management in South Africa*, Cape Town, Juta & Co.
- GAWITH M (*In prep*). *An Analysis of the Planning and Decision Making Process with Regard to the Permanent Settlement of Informal Communities in Hout Bay, Cape*, Masters Thesis, Department of Environmental and Geographical Science, University of Cape Town.
- HAP Organisational Development Services (1993). *Bridge: A Directory of Organisations and Conference Centres in South Africa*, Excom, Hap Organisational Development Services.

- HOLLICK M (1986). 'Environmental impact assessment: An international evaluation', *Environmental Management* 10(2), 157-178.
- HOLLNSTEINER MR (1976). 'People Power: Community participation in the planning of human settlements', *Carnets de l'enface*, 40:11-47.
- HUDSPETH TR (1982). 'Citizen participation in environmental and natural resource planning, decision-making, and policy formulation', In Sacks AB, Iozzi LA and Wilke RJ eds. *Current Issues in Environmental Education and Environmental Studies Vol III*, Selected papers from the 11th Annual Conference of the National Association for Environmental Education, 15-20 October, 1982, New York.
- KENT G (1981). 'Community-based development planning', *Third World Planning Review* 3(3), 313-326.
- KHAN F (1990). *Contemporary South African Environmental Response: An Historical and Socio-Political Evaluation, With Particular Reference to Blacks*, Masters Thesis, Department of Environmental and Geographical Science, University of Cape Town, South Africa.
- KRAYBILL R (1992). 'Outcomes are worthless if process is bad, Think process', *Track Two*, May, 7-8.
- LITTLE AM (1989). 'Background to environmental administration', In *IEM Legal and Administrative Principles Academic Manual*, Cape Town, Environmental Evaluation Unit.
- Ministry of the Environment, Ontario (1985). *Guidelines and policy on pre-submission consultation in the EA process*, Ontario, Canada.
- MOSER CON (1989). 'Community participation in urban projects in the Third World', *Progress in Planning* 32(2), 71-133.
- POTTER R (1985). *Urbanisation and Planning in the Third World, Spatial Perceptions and Public Participation*, London, Croom Helm.
- PRESTON G (1993). 'Integrated Environmental Management, Will it be worth having?', *Africa - Environment & Wildlife* 1(1), 31-35.
- RABIE A (1990). 'A new deal for environmental conservation: Aspects of the Environmental Conservation Act 73 of 1989', *Tydskrif vir Hedendaagse Romeins-Hollandse Reg* 53(1), 2-27.
- RAMPHELE M ed. (1991). *Restoring the Land: Environment and Change in Post-Apartheid South Africa*, London, The Panos Institute.
- RETIEF GdeF & BOSMAN DE (1984). *Engineering in the coastal zone*, Paper presented at Conference: Engineering Planning in the Coastal Zone, Strand 16-20 July 1984, Organised by Ocean Engineering Resource Group, University of Stellenbosch.
- SCHWELLA E & MULLER JJ (1992). 'Environmental Administration', In Fuggle RF & Rabie MA eds. *Environmental Management in South Africa*, 64-82, Cape Town, Juta & Co.
- SOWMAN M ed. (1988). *Socio-economic factors affecting estuarine degradation: A case study of the Kaffirkuils Estuary*, Environmental Evaluation Unit Report 4/88/27. Cape Town, Environmental Evaluation Unit, UCT.
- SOWMAN M (1991). 'Impact of resort development in the coastal zone', *Veld and Flora* 77(4), 120-123.
- SOWMAN M & GAWITH M (In press). 'Participation of disadvantaged communities in project planning and decision making: A case study of an informal settlement', *Development Southern Africa*.
- SOWMAN M, FUGGLE RF & PRESTON G (In press). 'A review of the evolution of environmental evaluation procedures in South Africa', *Environmental Impact Assessment Review*.
- WHITAKER C (1984). *Environmental impact assessment in land-use planning*, Paper presented at the International Training Course on Environmental Impact Assessment and Land-Use Planning, Hong Kong, 16-21 January.
- WOOD C (1988). 'EIA in plan making', In Wathern P ed. *Environmental Impact Assessment: Theory and Practice*, 98-114, London: Unwin Hyman.
- YAP N (1990). 'Round the peg or square the hole? Populists, technocrats and environmental assessment in Third World Countries', *Impact Assessment Bulletin* 8 (1&2), 69-83.