

PUBLIC PARTICIPATION IN DECISION-MAKING

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The decision-making framework has been divided into the general planning process, the role of the technically competent professionals and the role of the general public. This division assumes that there must exist an institutional process in which problems are isolated or perceived, alternative solutions are postulated and explored, and in which resolution is achieved when one set of alternatives is decided upon and implemented. This paper addresses the last problem, the role of the public in the decision process.

The general public is concerned in all of the steps in this process. Whether or not this concern is brought to bear on the ultimate decision depends on whether or not the public interest is represented in these various stages. One basic postulate is that if the public interest is adequately represented, the solutions explored and finally chosen will be better, in the sense of both fairly and efficiently working toward the best interests of the society, than would solutions implemented without the involvement of the public. If the relevant public is not involved, decisions are more likely to be inefficient and inequitable, inefficient in the sense that the same quantity of resources could be used to make everyone better off, inequitable in the sense that few benefit to the detriment of the general welfare.

The corollary to this postulate is that good decision-making necessitates involving those segments of the public having an interest in the outcome or in the delimitation not only of the problem but also of the range of solutions to be seriously considered.

To quote Borton and Warner "the fundamental principle underlying efforts to achieve effective communication and participation would seem to be... that those affected by decisions should have the opportunity to affect those decisions." (Borton, 1971, p. 286) What is needed then is to develop institutions which allow the relevant public to participate in all phases of the planning and policy-making process. This participation would involve both public education and an interaction between professional and technical advisors and the relevant public.

Past research indicates that the general public can not be expected to be informed about the wide variety of issues in which they have an important interest. They will be less likely to be informed and involved the more diffuse the impact of the problem, the smaller the problem figures in their lives, and the less frequently it affects them, even though when it does affect them the effect may be strong (e.g. people living in the path of an unusually high flood). Institutional arrangements for public decision-making must take into account this limited ability of the public to guard its own interests.

Much of the public participation in decision-making appropriately involves subgroups of the general public. The challenge is to design institutions which will coalesce these subgroups and bring their interests to bear throughout the decision-making process. A second challenge is to insure that the broadest feasible range of interests is represented since the broader the interests, the

broader will be the range of alternatives considered and the more likely it will be that the solutions seriously considered are both fair and economically efficient. Some general postulates regarding interest groups have been put forward by Cartwright and Zander. These are that the effectiveness of interest groups depends on the extent to which a clear goal is present, the degree to which the group goal motivates the group members, the degree of conflict within the group as to which goals and which means to attain them are appropriate, and the availability to the group of the resources it needs to attain its goal, whether these be economic, legal, intellectual or other. (Cartwright, 1958, p. 305) These generalizations have important bearing both on the techniques for involving relevant publics and on the design of institutional structures in which these techniques can be used.

A description of decision-making in several river basins will illustrate some public participation problems. The three river basins used as examples are the Susquehanna, the Brandywine and the Wisconsin.

Borton and Warner worked to obtain citizen participation in solving some of the problems of the Susquehanna River. Proposals had been initiated by the US Army Corps of Engineers several years earlier; Borton and Warner were given the task of devising forms of public discussion of the proposed alternatives. They used both public hearings and small group discussions among leaders of various interest groups and experts from the Corps. In addition

they used reinterviews to monitor the changes in goals and attitudes which occurred as the discussions proceeded. They concluded that perceptions were changed when the public was involved, especially those of the technical people and that had the public been involved at a far earlier stage than occurred, the techniques would have been far more effective. They emphasized the importance of having the policy-making process predicated on a continuous interaction among the public interest groups and between the public and the technical water managers. This interaction they felt should have begun when the problems were perceived and proceeded in an orderly fashion toward solutions which would have taken into account the conflicting goals of the various groups. (Borton, 1971, p. 284ff).

The Institute for Environmental Studies (IES) at the University of Pennsylvania developed a plan for the Brandywine River. Throughout the three year development of the plan they were very much aware of the need to involve the relevant public, but in the end the plan was defeated, apparently because not all of the relevant public had in fact been involved. An attitudinal study had been run at the outset of the project so the research group would know the goals and perceptions of the public in the study area. What appeared to be the relevant public groups were defined and careful liaisons with these groups were established. The principal method of communication with the general public, after the initial survey, was a series of public hearings. These were not well attended initially and by the time they were well-attended the plan

had been formed and those in attendance were very much opposed to what they perceived to be the plan. From hindsight it appears that had the IES run a series of surveys, the reasons for the growing hostility could have been discovered and one of the stumbling blocks, the IES' lack of knowledge of the intricacies and history of the Brandywine residents' dealings with "outsiders", might have been countered. By the end it was painfully obvious that the local people, 4500 in a 37 square mile area, did not feel involved. For the plan to be accepted, given the existing legal and institutional framework, it was vital that they feel motivated to participate in the plan formulation and involved in the outcome.

The basic conflict on the Wisconsin River is between recreation, for which a high water quality is desirable, and industrial pollution. There are several segments of the public which have major interests in the management of the river: the industrialists, their stockholders and consumers, and the recreators, both actual and potential, including more broadly, the environmentalists. The institutions nominally representative of these interests are the Wisconsin Valley Improvement Company (WVIC), a quasi-public body whose stockholders are the owners of the electric utilities and the pulp and paper companies located along the river, and the state government. The mission of the WVIC is to insure an even flow through the manipulation of reservoirs and mainstream dams to maximize electric power production, an important use of the river in the early twentieth century when the Company was organized. The State Department of

Natural Resources has one division in charge of water quality and another responsible for recreation, primarily fishing and hunting. These institutional arrangements leave major segments of the affected public unrepresented in any decision framework.

These illustrations suggest the range of problems and solutions which may be encountered in water management. They point up the need throughout the decision process to involve the people who are affected by the outcome. A more detailed analysis of three forms of public participation is appropriate. They are survey research, public hearings, and small groups workshops.

One of the more important forms of general public participation is survey research. This tool can be used for several purposes. One is to inform the decision-makers as to the attitudes and opinions of the public. A second is to measure the level of information on a particular topic which the general public possesses. Finally it is possible to isolate opinions, goals and perceptions important to subgroups of the population and thus obtain some knowledge of the range of attitudes held. Thus surveys can be used to predict some of the impacts of particular policies by finding out who is likely to be affected. In addition, panel surveys can be used to monitor the changes in goals and attitudes over time. Such reinterviewing is particularly important if experiments are to be evaluated or if a situation is changing rapidly as, for example, in a geographic area like the rural-urban fringe of a growing city.



There are several principles for conducting survey research. First, stable answers about preferences among alternative solutions will not be obtained if the people being interviewed do not know, nor care, about the problem being discussed. The attitudinal questions thus must deal with subjects with which the public is familiar and have formed opinions. This precludes expecting rational choice among technical solutions and rather suggests that what we can expect from the general public are opinions about the goals they feel are important. If however, the level of information is to be measured then it is appropriate to ask questions about subjects or problems with which many people may not be familiar. In this case what we are interested in is not their opinions but rather such things as the sources of the information on which the opinions are based, the differences in information held by different sub-groups of the population, and, as indicated above, the general level of information held. To quote Lansing and Morgan: "Surveys can not be used to make public policy directly. [ Rather ] they provide the basic input into discussions of public policy. They keep the [ decision-makers ] aware of the existence of diverse groups, with strong desires, requiring diversity of public policy." (Lansing, 1971, p. 7). Experience with survey research thus suggests that although the general public can and should be consulted through the survey technique, there are important constraints on the appropriate use of the tool.

Other methods of involving the general public have been used with lesser degrees of success. The public hearing, so heavily relied on by governmental units as a method of involving the general public, tends to be a very limited tool. Usually such hearings are one-shot affairs rather than repeated interactions at which progressively more focussed exchanges of information might occur. The public hearings are generally poorly and selectively attended. They are neither organized nor viewed as a vehicle for having many interest groups come together to exchange information and influence policy. The hearing tends toward an adversary mechanism in which the interaction is negative criticism by an under-informed, ill-organized public of a single proposal put forth by a well-organized bureaucracy. Innovative solutions are most unlikely to be generated under the conditions prevalent in such hearings. The experience on the Susquehanna was an exception to this. The hearings were panel forums integrated into the participation process. This suggests that it is not the public hearing, per se, but the way it is traditionally run which has so drastically limited its usefulness.

Workshops at which the identified public leaders and the technical people meet together have considerable potential for involving subsets of the public in the decision process. They were used most effectively on the Susquehanna. A variant of a workshop is a technique called gaming-simulation. The general

form of this is to have representatives of interest groups play a game together. One of the games which has been developed for water management purposes has the various players assume the roles of the decision-makers in the community: recreational owners, merchants, farmers, industrialists, et al. (Feldt, 1971, p.2). The object of this game is to demonstrate that only through cooperative action can the water pollution be constrained to acceptable levels. In practice the game seems to have two results: one is the demonstration of the object, but the second is that the individuals who play the game get to know each other and to appreciate others' points of view. Other games have been developed designed to uncover the relevant public interest groups and the influential people in these groups. There seems to be a broad potential for the gaming-simulation technique which is only beginning to be exploited.

In summary, it is difficult to involve the general public directly in the decision-making process except in general ways and under fairly specific conditions. It is important that the relevant segments of the public be involved, but also important to realize the severe limitations under which participation can be expected. The survey, the public hearing and the various kinds of workshops are methods for involving the general public and attempting to insure that the relevant segments of the public, those who will be affected by decisions, are represented in the decision-making processes. Although it is difficult to involve

the general public directly, ways such as these can be used to tap the relevant interests and thus guard the general welfare.

If all of the relevant groups are to be involved, appropriate institutions must be designed which use the available participation devices. Irving Fox has devoted considerable time and energy to these questions and has concluded that the organizing framework making the best use of public participation in the decision process is one which operates with a balance of power. Pressures from informed, well-organized groups representing a spectrum of interests must be heard and responded to. Such institutions must be regarded by the general public as capable of, and likely to, arrive at fair and efficient solutions. In addition, the institution, while stable, must be able to shift emphases as the perceptions and goals of the society change. (Fox, 1971, p. 130ff).

Where institutions are not properly designed, relevant segments of the public will be systematically excluded. As Fox points out there are several organizational characteristics relevant in designing institutional arrangements. One is the proclivity of the regulating agency to be controlled by the group it is supposed to regulate. Another is the tendency of public agencies to be responsive to a rather narrowly oriented clientele. A third overall problem is the difficulty which segments of the public with a diffuse but important interest have in protecting themselves against other better-informed, cohesive interest groups. Ways need to be devised for the diffuse groups to delegate their concerns to representatives with authority to implement policy.

The Wisconsin State government's concern for recreation provides an illustration of Fox's second point, that the agency tends to be responsive to a rather narrowly defined clientele. The Conservation Bulletin is the agency periodical whose mailing list can be defined as its recreation clientele. A comparison of the outdoor recreation participation rates of a sample of this list (Nelson, 1970, p. 14) with the recreation pattern of a sample of the residents of the entire state (David, forthcoming) suggests, as the content of the Bulletin would indicate, that its clientele is largely middle to upper income fishermen and to a lesser extent boaters and hunters. Pleasure drivers, picnickers and even swimmers are less well represented. The results of the narrowness of the interests of its clientele are reflected, in the area of water management and water quality, in the agency concern for fishing and almost complete disinterest in swimming.

A second illustration from the Wisconsin River, also pertaining to recreation, involves the water quality parameters used in setting the stream standards for the river. The standards were set in terms of dissolved oxygen (with additional constraints on toxic substances and levels of treatment for municipal waste). These standards are appropriate for some forms of water-based recreation, notably fishing. For others they are only somewhat applicable. In motorboating and water-skiing the ability to see through the water to avoid obstacles is crucial. For swimmers,

two of the three most important water quality parameters are visibility and the presence of cans and glass on the bottom. (David, 1971, p. 457).

The people concerned with the Wisconsin River basin need an institutional framework in which their interests are represented and their differences adjudicated. Industrial interests, well-informed as to the costs of alternative methods of arriving at water quality levels, with incentives to produce and to innovate to minimize pollution loads, would form one set of interest groups. Recreators and others concerned about reducing water pollution would form another diverse set of interest groups, equally well-informed about costs and aware of the water quality parameters important to the range of feasible water-based recreation on the Wisconsin River.

So far we have discussed the general public and the relevant subsets thereof as they exist at any particular time. It is, of course, vital that water management decisions be made which are efficient and equitable not only for the current population but for future populations and interest groups. Drawing from the Brandywine example, 4500 people were involved in the decision not to implement the plan. Yet that portion of the river basin is on the edge of urban development in Philadelphia. It is estimated that by the year 2020 the population will have reached 38,000. Another important lesson, besides the one concerned with

the participation pattern of the existing population, is that there is something drastically wrong with the institutional organization when 4500 people whose occupations are agricultural or semi-skilled make decisions for 38,000 people who will be urban-oriented. In fact, of course, the land use and population density will be decided largely by a handful of bankers and developers who will represent the interests neither of the current land owners nor of those who might live there in the year 2020. Public participation in decision-making will be largely absent and land use decisions, to judge from a great deal of past experience, will be inefficient and inequitable. In summary much public participation in decision-making does not satisfy the requirements for an appropriate decision structure. There are a number of tools which are effective in producing public involvement. These tools must be used in a viable institutional framework based on organizational postulates designed to insure maximum appropriate public participation.

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