A participatory approach to social impact assessment: the interactive community forum

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Abstract

The Interactive Community Forum is a method of social impact assessment that seeks community members’ judgments of social impacts resulting from project alternatives in an environmental impact assessment. The method employs a participant-driven description of the social system along with a set of community constructs to guide in the identification of anticipated social impacts. A diversity of participants with different areas of community involvement are exposed to a structured small group process where information is shared and community-level impacts are deliberated. Based on group discussion, participants project social impacts and identify measures necessary for their mitigation. The Interactive Community Forum thereby provides a means to integrate local knowledge into an Environmental Impact Statement and inform environmental decision-making through a modified public involvement process.

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1. Introduction

A plethora of models exists regarding the measurement of social impacts. Yet, the ability to predict impacts has been limited, in part, by an inability to account for localized variations in social structure and function \cite{Barrow2000, Geisler2000}. 

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As a result, techniques that consider how proposed projects may affect local environmental qualities from the perspective of people who live in, or otherwise use, the affected area are gaining relevance (see for example, Chambers, 1997; Lane et al., 1997; Stolp et al., 2002).

One such technique titled the “Interactive Community Forum” was developed for the U.S. Army Corps of Engineers’ environmental impact study (EIS) of alternatives for salmon recovery in the Snake River basin region of the United States (Harris et al., 1999a,b). The Interactive Community Forum (ICF) is a participatory approach to social impact assessment that assesses citizens’ judgments about the anticipated impacts of EIS alternatives on their community. The methodology detailed here represents an interdisciplinary form of social impact assessment (SIA) that brings together theoretical developments and empirical research from the fields of socio-psychology, community sociology, collaborative learning, public involvement, and environmental management. The individual steps and components of the ICF process are detailed here including community selection, citizen sampling, small group structure and facilitation, and data collection. Together, the practical tools employed in the ICF provide an innovative way to inform citizens’ judgments offering a valuable supplement to traditional SIA and a way to integrate social considerations into the EIS process.

2. The use of citizen judgments in participatory SIA

Participatory SIA allows for an articulation of impacts from a local perspective reflecting a unique understanding of an individual’s community. A focus on the locally unique, social, economic and political parameters represents the range of adaptations and reactions to past impacts and perceptions of future change. Such an identification of impacts can lead to more adaptive strategies for addressing the negative consequences of proposed actions (Becker, 1997; Gismondi, 1997; Laird, 1993; Reich, 1985; Taylor et al., 1995).

Yet, while participatory techniques offer an exciting supplement to traditionally technocratic methodologies, the quality of community members’ perspectives can and should be questioned when the process of developing their judgments is devoid of available information or simply reflects top-of-the-mind, offhand views. Yankelovich (1991) and others (Albrecht and Thompson, 1988; Daniels and Walker, 2001; Diduck, 1999; Poisner, 1996) suggest that a thoughtful consideration of alternative viewpoints and consequences of proposed actions is required to provide informed judgments. Without such an understanding of the issues the incorporation of individuals’ perceptions is of questionable utility to the assessment process.

The development of informed judgments is generally seen as a deliberative process that incorporates a genuine engagement among individuals, a dialectic exchange of information, and a more thoughtful weighing of alternatives than is typical of the general public when forming their perceptions (Yankelovich,
1991). For a process to be deliberative, Poisner (1996) argues that there should be an acknowledgement and listening to alternative perspectives. Inasmuch, the process should engender a critical reflection of one's beliefs so that they may articulate their viewpoints in a more thoughtful, and, thus, meaningful fashion. As in collaborative learning models, the engagement among individuals in the discourse of these viewpoints provides participants an opportunity to learn from one another and to ultimately provide quality judgments (Daniels and Walker, 2001).

3. Conceptual approach of the interactive community forum

The conceptual approach of the ICF focuses on models of small group learning and community theory to provide a basis for a participatory SIA that seeks informed community judgments for the projection and mitigation of impacts. Unlike SIAs where individuals are asked to express their perception of, or attitudes toward a proposed project, the ICF seeks to empower individuals by using their knowledge and local expertise to identify community-level impacts. Small group techniques are used to generate discourse among participants so that their judgments may entail a more thoughtful consideration of impacts. The following objectives guide the implementation of the ICF process:

- Provide community members with an opportunity to have their input formally included in the projection phase of the EIS process;
- Inform community members of project-related information and findings;
- Expose community members to one another’s perspectives and unique knowledge;
- Assess the baseline situation in selected communities and how they have changed;
- Assess community-level social impacts of EIS alternatives using the judgments of community members; and
- Obtain community members’ ideas about effective strategies for minimizing identified negative social impacts.

3.1. Selection of communities

Because of the large number of cities and towns within an impact region, it is generally not possible to obtain sufficient information about each community within the time frame of an EIS. To reduce the number of assessed communities, a theoretical sampling approach (Strauss and Corbin, 1990) can be used to select a purposive sample of communities based on a typology of predetermined criteria. For the ICF process, local community characteristics and project-related issues are used so that the selection does not predetermine the results of the SIA. For example, the criteria used for the Corps of Engineers’ salmon recovery study
included economic diversity, proximity to the impact area, state of residence, population size, key economic dependency (e.g., agriculture, timber production, tourism), recent social changes, community resiliency, and anticipated project-related changes in transportation modes and nodes, energy production, construction, and recreation (Harris et al., 1999a,b). Regardless of the application, it is important that different types of communities and their residents are assessed to ensure the full range of social impacts are considered in the EIS.

3.2. Selection of community members

Unfortunately, individuals’ interests and concerns are not all given equal consideration in a public forum. Special interest groups may dominate the discussion of impacts and minimize others’ ability to participate and to be heard (Force and Williams, 1989). Therefore, a different type of stakeholder is sought in the ICF in which community members are invited to participate based on their active involvement in community affairs and as being perceived by fellow residents as affecting community change. The assumption is that these “actively engaged” residents will contribute to the range of community-level impacts identified and not just those important to a certain group of individuals.

Active involvement in different areas of community life is important in that the roles people play affords them a unique understanding of a community and how it has and may react to proposed changes. These community roles are shaped by daily experiences and the context within which those experiences take place. For instance, an active business owner might provide one perspective of how their community will be affected by proposed actions by focusing on the impact to main street businesses. Alternatively, a health care specialist or an individual active in education might have a different perspective that focuses on a decline in the local tax base or a reduction in families.

A potential downside to sampling community roles is that selected individuals may represent a narrow cross-section of the population disproportionately weighing the findings in their favor (Soucy, 2000). To ensure a diversity of ideas and perspectives in the ICF, multiple community roles are a priori identified that span the social and organizational structure of the affected communities. For example, in the Corps of Engineers’ salmon recovery study the roles identified in Table 1 were selected to increase the range of impacts identified and address issues of representation and inclusion. These roles are based on an expansion of research conducted in the region on community resiliency (Harris et al., 2000) and a search of the literature with an emphasis on definitions of community and change (see for example, Selznick, 1992; Warren, 1963; Wilkinson, 1986).

In identifying a group of actively engaged community members to formally invite to the public forums several individuals from within each town or city are asked to initiate a snowball sampling process (Goodman, 1961; Patton, 1990). These initial contacts should be distinct in that they are in positions of knowing a
wide range of individuals from different community circles. The premise is that a diversity of initial contacts representing different areas of community involvement will ensure that a broad cross-section of community interests will be represented (Johnson, 1990). For the Corps of Engineers’ salmon recovery study, initial contacts included the city clerk, an elected official, an officer of a major civic organization, a county extension agent, and a school superintendent (Harris et al., 1999a,b). Each contact identifies several individuals that they feel most affect community change for each pre-identified role. These chosen individuals are in turn contacted for the same information on other community members. Finally, one person from each role is formally invited to the ICF based on who is most recognized as being actively involved. In the event that this person cannot attend or does not wish to participate it may be necessary to continue with additional stages of snowballing until a suitable number of residents are identified and invited for each role. While participating in the ICF, these actively engaged community members will interact and work together in a small group setting.

In addition to formally inviting actively engaged members, other “self-selecting” community members are sought to participate based on their self-identification of their areas of significant community involvement. Based on their self-identified roles, community members are placed in additional small workgroups reflecting the diversity of roles present in the invited workgroup. The replication of workgroup diversity, or replication logic (Miles and Huberman, 1994), is used to ensure that a maximum variation of perspectives and community knowledge is present in each small group to expose community members to a wide variety of perceptions and alternative viewpoints. Like the actively engaged workgroup, participants in the self-selected groups will interact and work together to identify community-level social impacts (Fig. 1).

For judgments to be accurate, it is necessary that participants have in-depth knowledge of the community being assessed. Therefore, only those people residing in an assessed community are allowed to project impacts. Community is defined for the ICF as a social organization of individuals possessing a shared history and culture (see for example, Selznick, 1992, pp. 357–386) and who identify the geographic location of a town or city as the place they call home. It incorporates those individuals residing outside city limits who identify the place...
where they go to church, send their kids to school, or consider their primary area of social interaction. These individuals possess the necessary knowledge to assess how their community will change as a result of proposed actions.

Finally, efforts should be taken to recruit individuals from marginalized segments of the population, as well as women and young adults. For the Corps of Engineers’ salmon recovery study, marginalized populations included Hispanics and Native Americans but could also include other minority and low-income groups as per their presence in the affected region. The full inclusion of the range of different community members in the ICF workgroups allows for the sharing of a diversity of community perspectives and expands the range of social considerations in the EIS decision-making process.

3.3. Small group techniques in mutual learning

Theories of small group interaction focus on facilitating open dialogue and discourse (Echabe and Castro, 1999; Wellins et al., 1991), promoting mutual learning (Friedmann, 1987; Rowe, 1998; Stasser and Titus, 1985), enhancing the quality of individuals’ judgments (Yankelovich, 1991), and advancing participatory democracy and empowerment (Daniels and Walker, 2001). As a set of techniques, small group processes are used in the ICF to expose community members to a diversity of ideas and to simulate discourse. By sharing information and debating ideas in a structured group setting, the quality of judgments may improve because of increased cognitive synthesis and a better understanding of the consequences of proposed actions. Research by Echabe and Castro (1999) and others (Devine, 1999; Gigone and Hastie, 1993; Stasser et al., 1989; Stewart and Stasser, 1995) have found that when members of a group possess different information that is pooled through mutual sharing and group dialogue, judgments based on this shared information are of higher quality than any of the members could have produced with
their own, more limited knowledge. Not only do group members identify more diverse ideas, but also their identification of issues reflects a wider range of perspectives and greater cognitive processing (Delbecq, 1975; Jehn, 1985; Lewin, 1965; Wegner, 1986). Furthermore, Tetlock et al. (1989) suggest that the sharing of unique information increases when assigning participants with different perspectives to a workgroup. Thus, by encouraging structured conflict, a more extensive consideration of ideas is given leading to higher-quality judgments.

3.4. Role of supplementary information

In addition to the unique community knowledge possessed by ICF participants, supplementary information related to proposed project alternatives is also necessary. By establishing a consistent level of project-related knowledge this information becomes one aspect of formulating judgments. A presentation and clarification of the technical aspects of a project provides a basis for identifying social impacts by including changes that may affect individuals’ perceptions. For instance, in the Corps of Engineers’ salmon recovery study, participants were presented information on changes in local transportation modes and nodes, recreation opportunities, power costs, and the recovery of salmon fisheries.

Diduck (1999) and Laird (1993) observe that a lack of knowledge inhibits effective participation and that “it is not enough that participants simply acquire new facts. They must begin, at some level, to be able to analyze the problem at hand” (Laird, 1993, p. 353). Hence, supplementary information should augment individuals’ judgments, not dictate their views.

3.5. Workgroup facilitation

A trained facilitator is used in the ICF workgroups to encourage dialogue and to enforce rules of interaction and communication. At the outset of the forum, workgroup participants introduce themselves to one another and describe those areas of the community where they see themselves as being most active and involved. A facilitator provides group members’ equal opportunity to share their information, which helps to establish a basis for later discussion and deliberation. Ice-breaking activities may also be used to ease tensions and to legitimize community knowledge. In the Corps of Engineers’ study, a community timeline was developed with input from forum participants by asking them about changes in their community since 1960. In addition to identifying community-level information by which residents could use to project future impacts, this activity helped to defuse suspicions and establish rapport between participants and facilitators.

The actual identification and projection of impacts is accomplished by way of a four-step process for the ‘baseline situation’ followed by each of the EIS
alternatives (Fig. 2). For assessing the baseline situation, Step 1 involves the presentation of supplementary information from the community timeline, important community events, or current demographic or economic trends. In Step 2, participants combine this information with their own personal knowledge to assign a numeric rating on an equally appearing 10-point interval scale for each of four dimensions of community structure, which are discussed in the following section. In Step 3, participants are given an opportunity to share with other group members their ratings and the reasons for why they rated each of the community dimensions as they did, as well as to address the views of others. Based on this discussion, in Step 4 individuals discretely re-assign a rating for each of the community dimensions and provide written justifications outlining the most important reasons for why they rated the dimensions as they did.

This four-step process (presentation of information, initial rating, discussion, and final rating and justification) is repeated for each EIS alternative using specific project-related information. The exception is that participants are asked to forecast impacts for each alternative on a scale ranging from $-5$ to $+5$ with the mid-point of “0” depicting their baseline rating for each of the four community dimensions. Individuals who perceive conditions to worsen because of the alternative being assessed are to give a negative rating, whereas if they feel conditions in the community will improve as a result of the alternative they are to rate it positively. Again, a facilitated discussion follows the initial rating period followed by final ratings and written justifications. At the conclusion of this process, group members are led through a facilitated exercise to brainstorm mitigation actions to address identified negative impacts.

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**Baseline Situation**

- **Step 1.** Presentation of supplementary information

**EIS Alternatives**

- **Step 1.** Technical information and likely changes related to the EIS alternatives

**Step 2.** Record initial ratings for each community dimension

**SOCIAL MAKE-UP**

**ECONOMICS**

**CHARACTER**

**ORGANIZATION & LEADERSHIP CAPACITY**

**Step 3.** Facilitated group dialogue of individual ratings and perspectives

- **Step 4.** Final ratings & justifications for ratings

Pooling of personal knowledge, group discussion, and supplementary information

Fig. 2. The Interactive Community Forum facilitated group process.
3.6. Community dimensions

Rather than providing a checklist of assessment variables, the ICF employs a participant-driven description of the social system using a set of community constructs to guide in the identification of anticipated impacts. The four constructs, hereafter referred to as dimensions, include social make-up, economics, character, and organization and leadership capacity. These dimensions were selected to depict areas of social organization that community members could relate to while providing broad enough areas of impacts that would not dictate their judgments. While the dimensions are based, in part, on existing models for measuring social impacts (see for example, Branch et al., 1984; Burdge, 1998; Finsterbusch et al., 1983; ICGP, 1994; Machlis et al., 1997), the ICF provides participants with the freedom to identify only those impacts they deem relevant to their situation. Lists of possible community characteristics that may be affected by proposed actions are provided to stimulate group discussion for each dimension (Fig. 3). The following are descriptions of each dimension with examples of possible characteristics by which to measure change.

3.6.1. Community social make-up

The social make-up of a community or “The People” dimension focuses on the characteristics of individuals and households. Characteristics may include, but are not limited to, traditional demographic indicators like population size, age, ethnicity, and migration. They may also include the horizontal patterns of social relationships (Warren, 1963) like family structure, values and attitudes held by various groups of people, and prevalent customs and lifestyles. Other characteristics may also include school enrollment, extended family, family stability, home ownership, public assistance, and the degree of young residents in the community.

Within the recommendations put forth by the Interorganizational Committee on Guidelines and Principles (ICGP) for social impact assessment, changes in interpersonal relationships are identified as critical elements of the social system. While an accounting of all the suggested variables are not included here, the premise of those impacts identified by the ICGP is taken into full consideration.

3.6.2. Community economy

The economy of a community is assessed in the “Jobs and Wealth” dimension. This dimension refers to major businesses and organizations that are sources of jobs and income in a community. It also focuses on characteristics of the economy, such as the diversity of industries (e.g., agriculture, forestry, and government) and the amount of capital or wealth available to support community services and activities.

The economic aspects of community life are important to understand individuals’ perceptions of social impacts, particularly those defined by negative economic change (Hollingsworth and Boyer, 1997). Concern should be given to the scale at which these impacts are conceptualized. A focus on the regional
THE PEOPLE – Social Make-up
Characteristics of individuals or households that may include population size, how rapidly the community is growing or losing population, its age and family structure, as well as the make-up of various groups of people, including their ethnicity and their values and lifestyles.

- To what extent is your community’s population increasing or decreasing in size?
- Is your community’s population aging? Is there an increasing amount of older people living in your community?
- Are growing numbers of retirees living in or moving to your community?
- To what extent is ethnic diversity an important element of the social make-up of your community? Is that diversity increasing or decreasing?
- Is school enrollment increasing or decreasing?
- To what extent do people have extended families living in your community? Are your relatives or children moving away?
- Do most residents own their own homes? Has this changed in recent years?
- To what extent are individuals and households on public assistance?
- What are the most prevalent values in your community – how would you describe your community’s customs & lifestyle?
- Are families stable in your community?

THE PLACE – Character
Characteristics of the community’s human-built and natural environment, including the attractiveness of the downtown, the quality of the roads, traffic safety, level of social services provided, as well as quality of parks, open spaces, and attractiveness of the surrounding scenery.

- What is the appearance of your community’s central downtown and of its residential areas?
- How many storefronts are vacant – are they increasing or decreasing?
- To what extent do people shop in your community opposed to elsewhere?
- How adequate are the social services (i.e., health, safety, and education) in your community?
- Are your medical facilities, community/senior centers, etc., adequate?
- How safe and crime-free do people feel in your community?
- What are the dominant modes of transportation (i.e., car, truck, railroad, and biking) that move people and goods in your community?
- How are the conditions of roads and highways in your community and region? Are they adequately maintained? Are you at a central crossroads?
- Is there traffic congestion in your community? How safe are your streets?
- Are there changes in your community’s land-use patterns?
- How is land tenure and absentee ownership of farms changing?
- What is happening to the size of farms surrounding the community? Is there any annexing of farmland to residential areas?
- To what extent does your community have parks, open space and rivers?
- How attractive is the community’s surrounding scenery?
- What is the level of air and water quality in your community?
- Overall, how would you describe the sense of place in your community? How attached are people to your community?

JOBS & WEALTH – Economy
Characteristics of major businesses and sources of jobs in the community, its economic diversity in terms of the variety of businesses and industries, and diversity of financial assets (the amount of capital or wealth) available to support community services and activities.

- How would you assess the job opportunities in your community—are there many, and how well do they pay?
- To what extent do people have to commute to other places to work?
- What proportion of your community’s adults are unemployed? How many people in your community are employed?
- What is the economic base of your community—do a few major industries or businesses dominate, or is your community economically diverse?
- To what extent are public sector jobs a major part of your community’s economy? Are many people employed by federal, state, county, and municipal agencies?
- Where does money go from sales in your community—does it flow out to other places? Is income reinvested in local businesses and the community or is it invested elsewhere?
- How wealthy are people in your community? What is the proportion of households in your community living below the poverty level?
- How costly is it to live in your community? How costly are utilities?
- Are property values comparatively high or low in your community?

VISION & VITALITY – Organization and Leadership Capacity
Characteristics of the community’s social organizations and their levels of activity, community cohesion and residents willingness to work together, the effectiveness and vitality of local governments and leaders and their vision and preparedness for the future.

- How many civic organizations are active in your community?
- What is the level and quality of political and civic leadership in your community?
- How large is your community’s budget, and what is your level of government expenditures?
- Has your community successfully used bonds and levies to pay for projects?
- To what extent does your community have adequate fiscal resources and tax revenues?
- Does your community have any economic development plans? Has the community engaged in a process of planning or zoning?
- Has your community applied for and received grants?
- To what extent does your community have control over influential events as opposed to being affected by outside forces?
- How prepared for the future is your community? Has your community discussed its vision for the future and how to realize that vision?
- How would you describe the level of social activities (i.e., events and festivals) in your community? Are there many church or school activities?
- How friendly and interesting is your community?
- How do people respond to and cope with change? How would your community respond to future changes?
- What is your community’s level of cohesiveness or commitment to the community and ability to work together to get things done?
economic system can overshadow the economic well being of smaller communities. Therefore, characteristics of this dimension focus on local aspects of the economy, including job opportunities, extent of public sector jobs, commuting for work, unemployment rates, dominant economic base, income multipliers and reinvestment, wealth, poverty, cost of living, and property values.

3.6.3. Community character

The character of a community is referred to as the “The Place” dimension. This dimension refers to the characteristics of the human-built and natural environment of a community. The human-built environmental may include the attractiveness of the downtown, the quality of its infrastructure, and the level of social services provided. A community’s natural environment includes local characteristics like parks, fields and rivers, and the attractiveness of the surrounding scenery and the quality of the region’s natural environment.

General quality of life aspects help define the character of a community. Of particular importance are those aspects of community life that are a result of residents’ relationships with each other and the surrounding natural environment. Specific characteristics may also include degree of local shopping, vacancy of storefronts, adequacy of schools and medical services, safety and crime, dominant modes of transportation, land tenure and absentee ownership, parks and open spaces, air and water quality, sense of place, and community attachment.

3.6.4. Community leadership capacity and social organization

The leadership capacity and social organization of a community is referred to as the “Vision and Vitality” dimension. This dimension includes those characteristics of a community’s social organizations and the effectiveness and vitality of a community’s government. It also refers to a community’s vision for the future, their desire and preparedness to make that future a reality, and the degree of cohesiveness, or extent to which people identify with their community, are committed to it, and work together to get things done.

Social capacity has been widely suggested to be a critical determinant of a community’s ability to adapt and respond to change and to dictate their future (Eade, 1997; Putnam, 1995). A high degree of social capital represents community members’ trust in one another and their ability to work together to accomplish tasks. Specific characteristics may also include the number of civic organizations, quality of public and civic leadership, local government expenditures, use of bonds and levies, fiscal resources and tax revenues, economic development plans, control over influential events and outside forces, and ability to cope with change.

4. Research implications of the interactive community forum

The degree to which community members are informed and knowledgeable of local events and project-related issues influences their ability to provide informed
judgments of community-level impacts. SIA strategies like surveys and public hearings that lack deliberative engagement are inadequate for obtaining such judgments. In this vein, the ICF is designed to address a myriad of socio-psychological factors influencing judgments including the effects of vested interests, the pooling of unique knowledge, and the role of supplementary information. Yet, how effective was the ICF in accomplishing these goals? Does the ICF truly provide a useful supplement to existing techniques for SIA practitioners?

With the goal of improving the practice of SIA, four areas of research related to the implementation of the ICF process are suggested. First, the effect of group dialogue on the quality of individual’s judgments needs further study because much of the research on small groups is limited to laboratory evaluation. Within this area of research, additional consideration is needed on the ability of community members to share their knowledge with others, formulate quality judgments, reexamine their perspectives, and incorporate the ideas of others. Research should also consider the contentiousness of EIS alternatives and the effect of group diversity in terms of age, gender and community roles.

A second area of research requiring further study is the effect of invited community members on the identification of social impacts. Savatski (1981) and Seidler (1974) suggest that selecting a diversity of individuals based on their involvement in different areas of a community is an effective strategy to control for selection bias. Past research has also found that specially selected residents, sometimes referred to as informants, have an accurate perception of the changing social structure of organizations and communities in which they are members (Campbell, 1955; Poggie, 1972; Young and Young, 1962). However, care must be taken when inviting actively engaged members to represent community interests. Burningham (1995) cautions that approaches like the ICF may marginalize some perspectives in favor of those who have ‘better’ knowledge. Do the vested interests of invited individuals’ influence their ability to accurately portray the perceptions of and impacts to other community members? Are the interests and concerns of self-selected participants identified by those identified as most actively engaged?

The third area of research focuses on the effects of community roles on the deliberation of impacts. In convening participants characterized by a diversity of roles within each workgroup, and then promoting the sharing of their perspectives, the ICF encourages participants to consider different sources of knowledge and perceptions when formulating their judgments. Based on differences in roles, unique insights might be obtained concerning the effects of project alternatives. Focusing on the contributions of different roles may also induce individuals to share information related to their expressed areas of expertise and subsequently provide information for others to consider (Devine, 1999; Stewart and Stasser, 1995). To what extent is this actually the case in the ICF? Do individuals representing different roles provide unique information and expand the range of impacts considered?
Lastly, while the steps of the SIA process are well documented (ICGP, 1994), there is less agreement on the effective and appropriate methods for identifying impacts. When looking across the spectrum of SIA applications factors of expertise, budget constraints, and preferences for types of information dictate the techniques used. If the benefits of using both participatory and technocratic approaches are to be realized in environmental decision-making, continuing research is needed in their joint development. In the case of the ICF, how can the strengths of this methodology be used to supplement the weaknesses of other approaches and visa versa?

5. Conclusion

Future applications of the ICF are predicated on the effectiveness of group techniques and the ability to generate informed judgments. We make no claim that the ICF methodology cannot be improved or should be used in lieu of other approaches. Rather, propose the ICF as a compilation of practical techniques and a companion to the more traditional approaches to SIA to achieve the goals of citizen participation, participatory democracy, scientific rigor, and sound decision-making.

A key premise of this participatory approach is that, assessing the ways in which communities will be affected by proposed actions, citizens who will be directly affected by those actions should be given an opportunity to assess those impacts. An assessment lacking locally defined indicators increases the risk that important community-level impacts will be missed. The significance of the ICF methodology is highlighted by its ability to inform environmental managers of localized impacts and possible mitigation strategies. Clarifying the ways in which community members interact and their judgments of how they will be affected by proposed actions is a necessary function of an assessment process that is sensitive to local issues. With continued research, the ICF has utility in bringing a diversity of individuals together to make informed, deliberative judgments of how their communities will be affected by environmental management decisions.

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