

Public Involvement in Pollution Management

Formal public involvement at the scoping and draft review stages is part of the environmental assessment (EA) process and is usually required for industrial projects. The wider use of participatory approaches in World Bank pollution management projects is still evolving. Public involvement in setting priorities for pollution management is not yet common, although there is evidence that an informed public has an influence on reducing pollution. In the development of projects with a pollution management component, emphasis should be placed on improving consultation between government, industry, and the public.

Value of Public Involvement

Public participation, in a broad sense, is becoming part of Bank activities in many areas, including sector work, as well as projects. Participatory approaches have been most widely used in rural development projects, but there is increasing involvement of local communities in the design and implementation of urban and rural water and sanitation programs. A study of rural water supply projects concluded that the effectiveness of participation was the single most important determinant of overall quality of implementation (Narayan 1994).

Recent OECD annual Evaluation Results have concluded that beneficiary participation in preparation enhances the sustainability of projects. In response to concerns of task managers, it was noted that although participation typically added 10-15% staff-weeks to preparation time in the design phase, much of the additional cost was covered by outside funding sources. Furthermore, the longer preparation time was typically offset by speedy negotiation and quick loan effectiveness.

Bank experience with public involvement in pollution management is still limited, but this is changing. In addition to involving those directly affected by a program or project, public involvement can help build an informed constituency to influence priority setting in pollution management and support for enforcement. It may also be a way to reach and educate small-scale industry.

Public involvement is a way of ensuring that the project is relevant to local needs and responds to local concerns. It can improve the overall quality and success of a project and should be endorsed by task managers as an integral part of project identification and design.

Public Involvement

Levels of Public Involvement

Public involvement can be defined as a social communication process whereby individual citizens, NGOs, the private sector, and other interested parties participate with government at various levels in decisionmaking. The *World Bank Participation Sourcebook* (World Bank 1996) presents experience on projects, lessons learned, and methods of participation. There are several broad levels of public involvement:

- *Information dissemination* is a one-way flow, usually involving disclosure of information about a proposed project to interested parties.
- *Consultation* is a two-way information exchange between stakeholders; decisionmaking authority remains with the promoter but other groups provide feedback on decisions.
- *Participation* is a process through which stakeholders influence and share control over development initiatives and the decisions and resources that affect them. There are several

types of participation: *joint assessment* and *collaboration* both involve partnership in design and implementation, while *empowerment* puts decisionmaking responsibility and resources in the hands of the stakeholders directly involved in the project.

In practice, in industrial projects, the emphasis has normally been on information dissemination and consultation (for example in the EA process for a new facility). Formal, structured exercises in participation are less common but may occur, for example, in environmental audits or in industrial monitoring activities.

Identifying Stakeholders

The key to successful participation is the effective involvement of all the main stakeholders. The *World Bank Participation Sourcebook* defines stakeholders as “those affected by the outcome—negatively or positively—or those who can affect the outcome of a proposed intervention.”

Stakeholder identification is essential to the process of public involvement. The task manager, the project sponsor, or the government can prepare an initial list of stakeholders, and others will usually come forward or be identified through the public involvement process. Stakeholders fall into four broad groups:

- The borrower or project sponsor
- Beneficiaries of the project
- Other groups affected by the project
- Other interested parties (for example, NGOs and other donors).

Social assessment procedures may be necessary for systematic stakeholder identification and participation (see World Bank 1995).

Impacts of Information

An informed and active public can have a significant impact on the performance of industry. Detailed studies by the Bank in Indonesia and elsewhere have shown that industries in areas where there is an educated and informed population are less polluting than their counterparts elsewhere. Clearly a number of reasons underlie this difference, but the impact of public opinion is a key factor.

The same concept underlies the U.S. requirements for publication of the Toxic Release Inventory. Focusing public attention on the wastes being generated in facilities has prompted significant reductions in the actual levels in subsequent years. Recent developments in the EU on the release of pollution information are designed to have similar impacts. In the Asia and Pacific region, the Australian government and the OECD are promoting the development of Pollutant Release and Transfer Registers (PRTR) for countries in the area.

Involvement with Specific Industrial Projects

New Plants

Public consultation is required as part of the scoping and review of the draft EA for major new industrial projects (those ranked as Category A). For Category B projects, the formal requirements for consultation are less well defined, but the benefits of early consultation should be considered.

The focus of the formal consultation has typically been those people directly affected, usually because of resettlement concerns (OD 4.30) or impacts on indigenous peoples (OD 4.20). In some cases, issues may be raised concerning pollution and health impacts, and this input provides information for resettlement planners.

A project that involved a wide range of organizations was the preparation of a waste management program in the Caribbean. By contrast, preliminary consultations on an oil project in Central Asia could not identify any NGOs outside the government system and had to rely on appointed local officials to provide input.

Upgrading Old Plants

In some cases where a highly polluting industry is also a major local employer, public concerns have led to a “jobs versus pollution” debate on the options (remediation or shutdown).

For example, a USAID technical assistance project in Romania has involved extensive consultation and discussion. There, a major copper smelter and refinery is the main source of envi-

ronmental health risks in surrounding towns. Working groups have been established on a number of issues of high concern (for example, blood lead levels). The groups included representatives from the smelter, local government agencies, medical researchers, and organizations such as the local kindergarten. The groups are working to develop and implement work plans for short-term actions to improve local conditions.

In a Bank project in Algeria, local NGOs from the communities surrounding a major steel plant were brought into a health assessment process to identify the local impacts of the plant. These groups have been active in discussions on realistic options for upgrading the productivity and environmental performance of the plant.

The design of a pollution abatement project in Egypt promotes the involvement of NGOs (including the influential professional associations) and the media, in order to build public expectation and pressure for the adoption of good environmental and safety practices by the industries in the project area.

In many cases, environmental audits are carried out to provide data that can inform the debate. The solutions have typically involved closure of certain processes and upgrading of others. Worker representatives should be involved in such discussions.

Community Relations Programs

It is increasingly common practice in industrial countries for major facilities to develop a formal community relations program. To date, experience with these approaches in Bank work has been limited. A project in Central Europe (funded by another development bank) that involved upgrading of a large metal smelter included a specific component for the establishment of a community group to track progress of the upgrading. An independent technical consultant was appointed as the liaison between the project and the community.

One broad possible community role is that of a “watchdog” over the performance of the particular enterprise, an attitude sometimes known as environmental vigilance. This is preferably done as part of a structured community involvement program developed by the enterprise, but it can also be done separately. Typically, a com-

munity-based group regularly monitors the pollution performance of the plant, disseminates the information gathered, and provides feedback to the plant and the relevant authorities. Monitoring in this context could mean simple visual observation, basic testing of effluents, or participation in a more formal regular sampling and testing program. Participation of community groups and NGOs in the preparation of projects (as is beginning to happen) clearly provides a basis for longer-term involvement.

Involvement in Priority Setting

In the past, priorities for pollution management have typically been set by “experts” from specialist government agencies or by outside consultants. An example from Calcutta (see Box 1) demonstrates the increasing recognition of the shortcomings of this attitude. There is growing understanding that priority setting must involve all the parties (that is, all the stakeholders) affected by the issues. Newer approaches have been based on various forms of community involvement, through existing political structures and ad hoc consultations. Comparative risk assessment methods (see the chapter on this topic) have been used to present information on pollution impacts in a structured and informed way and, in some approaches, as the basis for community awareness raising and education.

For example, in Nizhnii Tagil in the Urals region of Russia, an American NGO is applying a community action model to concerns about the impacts of the many sources of industrial pollution. As a result of the intervention, a broad-based committee has been appointed by the city to identify and address the most urgent pollution problems. The committee is carrying out a comparative risk assessment of the many toxic air pollutants that have been identified, and local specialists are developing a prioritized risk reduction strategy.

Community Monitoring

Approaches

Community monitoring is not a new concept: concern for environmental issues has been a grass-roots issue in many countries. The new aspect of com-

Box 1. Environmental Concerns and Social Impacts in Calcutta

Over the last two decades, Calcutta's Urban Development Program (CUDP) has focused on providing basic infrastructure services, without specific provision for taking environmental effects into account. A new Calcutta Environmental Strategy and Action Plan will address the environmental constraints and opportunities related to the CUDP's development goals. The new plan will include consultations with stakeholders and will address such questions as willingness to pay for different options. The interesting point is the recognition that implementation of environmental priorities without careful regard for social impacts could exacerbate the plight of the poor. An example is the imposition of "polluter pays" principles without considering ability to pay and the loss of jobs that could follow from the closure of polluting factories. Resolution of such issues will be difficult.

Source: Biswas 1995.

munity monitoring is to extend interest in the environment from the educated elite to the broader population directly affected by pollution and other issues. Community monitoring is also a logical progression of the change of emphasis in environmental management, from source control alone to achieving real ambient improvements.

The advantages of involving the community in monitoring can include a clearer view of priorities, cost-effective extension of the database, and mobilization of local support for necessary preventive and remedial actions. In particular, a focus on the health and economic impacts of pollution at the local level can allow assistance to be targeted at critical problems, with the active support of those directly affected. For example, studies by USAID in periurban neighborhoods of Quito identified a number of health risks, such as food poisoning, gastrointestinal diseases, and bronchial infections (from dust in the dry season), that required quite different solutions from those proposed for dealing with perceived citywide problems.

Techniques

The introduction of community monitoring or environmental vigilance approaches requires the

availability of simple and reliable testing methods that can be used by local communities. For example, the use of litmus paper strips may be sufficient to monitor the acidity of wastewater discharges from a plant. More sophisticated systems can be developed; in Canada, a number of members of a native-peoples community were trained in simple laboratory methods, allowing them to monitor and control the quality of the local water supply. This Canadian community is now providing advice to a Chilean Indian community on such methods.

Community monitoring methods can span a wide range of technologies. A number of NGOs are working on the development of simple kits using locally available materials. Commercial suppliers in developed countries offer several basic testing systems that can measure a wide range of parameters for, typically US\$0.5–\$2.0 per test for each parameter. At a slightly more expensive level, robust portable monitors are available for a number of key environmental parameters. Once purchased, these instruments are reliable and simple to use.

The availability of technology is only a part of any monitoring system. Regular and reliable sampling and good analysis and reporting are also essential. Sustaining local interest in monitoring over a long period can be a difficult task; experience is lacking on this question.

Policy Work: Lessons from the Urban Sector

Many industrial pollution problems have an urban connection, and most urban pollution problems have an industrial component. Urban environmental priority setting is frequently closely related to industrial issues, and the findings on public participation emerging from urban studies are very relevant to management of industrial pollution.

The Urban Management Programme has concluded that "one of the main contributions to environmental degradation is the lack of public awareness of the problems and low participation in efforts to improve the urban environment."¹ In particular:

- A fundamental problem is lack of effective public information and education; a public educated in environmental issues and possible

alternatives is in a position to apply pressure. Opportunities to influence and participate in decisionmaking are also crucial.

- There is a need to build public pressure and political will. In the absence of public pressure, decisionmakers will choose options that offer the highest short-to-medium-term benefits. This is a particular problem where decisionmakers may have a vested interest in promoting new industrial development, for example.

Through participation, the people affected (especially the disadvantaged) can influence policy and management decisions. Participation should continue over the life cycle of a project or program. However, “urban environmental improvement cannot be initiated or sustained without constituencies that demand a better quality of life.” In most developing-country cities, there is already a powerful constituency for the environment among the upper class; the challenge is to build a constituency among the urban poor.

Outline of a Participatory Process

The following general practice pointers are used to guide the participatory process and to keep the necessary time and cost to a minimum.

- Start the participatory process as early as possible in the project design.
- Ensure government support for a participatory approach.
- Identify and then involve the stakeholders.
- Involve intermediary NGOs that have local credibility.
- Identify and involve responsive individuals or agencies in the government.
- Build community capacity to make decisions and to convey information back and forth.
- Make a particular effort to understand the concerns of the poor, who are often not well represented.
- Facilitate participation by women, who may not be represented in the formal structures.
- Consider institutional or regulatory measures to support participation.

Procurement Issues

Early experience with projects with a high level of community participation demonstrated a

number of problems related to procurement, contracting, and disbursement when dealing with small and often rather unstructured organizations (Bartone et. al. 1994). These issues are still being resolved, but the key point is that they need to be addressed early in the preparation process. One recommendation is that an implementation manual be prepared for the particular circumstances, setting out clear and simple contractual practices that would be acceptable under the project.

Support to Task Managers

The Social Policy and Resettlement Division of the World Bank’s Environment Department (ENVSP) has prepared a series of Dissemination Notes and other documents on participation and can provide advice to task managers. There is also an increasing number of social policy specialists in the regions who can assist with project design and implementation.

Note

1. The Urban Management Programme is jointly sponsored by the World Bank, the United Nations Development Programme (UNDP), and the United Nations Centre for Human Settlement (Habitat).

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