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The Influence of Social Analysis on a Solid Waste Management Project: West Bank and Gaza

Social Development Best Practice Elements

- Attention to adverse impacts
- Organizational and institutional analysis
- Institutionalized mechanisms for participation in decision-making, implementation, and monitoring

The West Bank and Gaza suffer from severe environmental degradation, including deterioration of groundwater and uncontrolled dumping of solid waste. These problems have been addressed in Gaza with the assistance of bilateral donors, but until the design of the Solid Waste and Environment Management Project (SWEMP) in 2000, they were largely neglected in the West Bank.

Solid waste management practices in the West Bank are characterized by infrequent and inadequate waste collection services, improper disposal at open dump sites, and open air burning. Hospital and household waste are mixed together at sites that are only marginally controlled. Litter and waste are dumped in open lots, on the roadside, and in small village dumps. Odors from these sites discourage tourism, thus depriving residents of a possible source of

income. Moreover, runoff and leachate threaten to pollute groundwater aquifers, the West Bank's main source of water supply. These environmental and public health problems are compounded by weak infrastructure and lack of institutional capacity.

Project Objectives

In an effort to address these problems, the Palestinian Authority's Ministry of Environmental Affairs requested Bank assistance for developing a solid waste project to benefit more than 200,000 people in the impoverished Jenin district. The aim was to protect the aquifers and improve public health by closing 84 uncontrolled dumpsites and restoring that land to more protective use; and by developing a controlled regional landfill and institutional capacity to manage the solid waste system.

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The project was designed by Palestinian officials and the project team in a participatory manner, using public consultation techniques such as focus groups and individual interviews. The project has established a Joint Services Council (JSC) for Solid Waste Management (a 17-member representative body with quasi-governmental status). A social assessment (SA) conducted before implementation highlighted a number of issues that had not been adequately taken into account in the original design. Many of the SA's recommendations were incorporated into the final project design.

Elements of the Social Assessment

The MNSSED Social Team commissioned four members of the Palestinian Social Scientists Network to carry out the SA, using a variety of methodologies. The local team conducted interviews with key stakeholders (officials, landowners, community leaders, community members); case studies of several villages; a group discussion with members of one village council; focus groups with large landowners who would be affected by the project; and a consultative workshop with representatives of the municipality of Jenin, the Ministry of Local Government, the Ministry of Health, and other stakeholders. The SA team also met with landowners and residents directly affected by the proposed landfill, i.e., those living less than a half kilometer from the site. The team conducted an initial round of interviews, reviewed the data, and then carried out additional fieldwork to confirm certain findings and obtain additional data.

These activities explored the attitudes of stakeholders and beneficiaries toward the existing solid waste management system, their knowledge and expectations of the proposed site, their views of the project's

advantages and disadvantages and its decision-making process, and their degree of commitment to the project. The team also produced a socioeconomic profile of the affected population, including generation patterns for different types of waste (organic, plastics, metal, textiles, rubber, etc.) in urban and rural areas, attitudes toward dumping fees, mechanisms for community involvement in project implementation and monitoring, and land issues.

Impact on Project Design

The SA influenced the project in the following ways:

1) Site selection. The original proposed site was 6.5 hectares of land, 3.5 hectares of which was planted with olive trees. During the conduct of the SA a workshop participant suggested moving the southern boundary of the site to save the olive orchards. The team, recognizing the significant historic, cultural, and economic value of the orchards, and the likely resistance of landowners to replacing them with a landfill, proposed to the JSC that the southern border of the site be moved to utilize uncultivated land.

2) Identifying stakeholder concerns. The SA identified three distinct groups of stakeholders, each with its own set of concerns: local governments and institutions, landowners and residents living near the site who could be negatively affected by the project, and direct and indirect beneficiaries.

Representatives of local governments and institutions believed the project would have positive outcomes in terms of health, environment, and living conditions, and were generally satisfied with the JSC as the structure formed to manage the landfill.

However, the SA found that small municipalities and village councils wanted more information about the expected benefits of the project, and wanted to participate more directly in the project's preparation and ongoing management.

The Joint Services Council was designed to respond to community needs and to link municipalities and village councils in managing the landfill. The JSC incorporates into its governance structure all 13 municipalities and 73 villages within the Jenin District, and gives voice and decision-making authority to the affected communities. It also places responsibility for cost recovery in the hands of decision makers whose communities will benefit from the services provided. Under this arrangement, local communities continue to be responsible for solid waste collection, and the JSC is responsible for closing uncontrolled dumps and constructing and operating the landfill. The communities collect fees to cover these services, and, in turn, pay the JSC.

Landowners and residents believed the project would improve their quality of life, but had negative views of the professional capacities of municipal management, and were concerned about the project not proceeding in compliance with environmental specifications. Landowners were also concerned that the compensation plan prepared by the project team offered them 20 percent below market value, and did not consider the social dimension of their loss of land.

Capacity Building

These findings led to the inclusion of an upstream capacity-building activity financed by the West Bank and Gaza Technical Assistance Trust Fund. This activity focuses

on developing the organization and technical capacity of the JSC and the municipalities and village councils in the Jenin District to deliver and efficient and cost-effective services. The concerns of landowners were also addressed by increasing the level of compensation and moving the boundaries of the site so as not to disturb the olive orchards.

Direct and indirect beneficiaries did not have a clear understanding of the project's objectives until meeting with the SA team. Most of the public had not been informed of the proposed landfill site, and many beneficiaries were unaware of the health risks involved in current dumping and waste-burning practices. Once they understood the project, they made a number of valuable suggestions for improving waste management in their areas, including increasing the number of waste containers and ending the practice of burning waste. They also offered suggestions concerning fee collection, participation in decision-making, and the need for public awareness programs.

The suggestions of these beneficiaries led to the arrangements for fee collection described above, and to an intensive focus on public awareness campaigns. The campaigns will be carried out by community-based organizations, NGOs, women's groups, and other local groups under contract with the Ministry of Environmental Affairs and the JSC.

Monitoring Social Development Outcomes

The demands of beneficiaries for involvement not only in project preparation, but also in implementation and monitoring, led to the inclusion of these responsibilities in the design of the JSC. Three social

development indicators will be developed and implemented in the project's monitoring and evaluation plan. These are: 1) a well-functioning JSC, 2) public knowledge, attitudes and practice regarding solid waste management, and 3) beneficiary satisfaction with the project. Beneficiary satisfaction will be measured through willingness-to-pay and satisfaction surveys. Public health and environmental improvements will be measured by the progress in elimination of current nuisances to local communities through closure of uncontrolled dump sites.

The SA for the Solid Waste and Environmental Management Project helped to overcome the resistance of landowners,

the general lack of trust in local government capacity, and the lack of ownership by local communities of the problem of solid waste management. It helped to foster agreement among stakeholders with widely differing interests, identified the key elements for sustainability of the solid waste system, laid the groundwork for the protection of aquifers that are the major source of drinking water supply, and helped to develop the capacity of local government and community-based groups to carry out similar projects in the future.

