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Proposed Methodology for Community-Based Infrastructure Projects

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Abstract

Community participation is considered as one of the key activities of local government development. The new role of communities in infrastructure projects is to act as a bridge between the governmental agencies and the individual households. Low-income groups are generally poor not only financially, but also weak in terms of their power to influence decisionmaking on matters relating to their livelihoods and development of services. They are often totally excluded from the government development processes of planning, budgeting and project implementation. There are many parties concerned with infrastructure development that should be involved in a systematic manner in the formation of public policies and local planning. This study proposes a methodology to deal with all involved parties in infrastructure projects and it is recommended that it be followed from the first phase of any project. The proposed methodology is based on the investigation of the best practices and lessons learned from projects implemented by different agencies in Palestine. It is recommended that municipalities should reshape the people's understanding of the role and capacity of municipalities and to develop new mechanisms to develop trust and transparent relations with communities.

Keywords

Community, municipality, infrastructure, methodology

INTRODUCTION

Low-income groups are generally poor not only financially, but also weak in terms of their power to influence decision-making on matters relating to their livelihoods and development of services. They are often totally excluded from the government development processes of planning, budgeting and project implementation. In the Gaza Strip environment there are several implementing agencies of infrastructure projects, namely ministries, municipalities and other Non-Governmental Organizations (NGOs) working in collaboration with ministries or municipalities. The projects are either financed by the implementing agency if a budget is available or as a contribution from a funding agency. The projects concerned are different in terms of their sectors and scales. In general, three factors may control and influence the form of

involvement and relationships between partners:

- Project owner beliefs and guidelines;
- Project sector and scale, and
- Funding agency requirements.

The relationship between partners impacts on the project process during the various project phases of identification and prioritization, design and preparation of documents, construction and operation, in a number of ways. This paper reviews several case studies concerning implementing methodologies of municipal infrastructure projects taking into consideration different funding agencies working in the Gaza Strip. These include the Palestinian Economic Council for Development and Reconstruction (PECDAR), Save the Children Federation, and the United Nations Development Program (UNDP).

BACKGROUND

In some developing countries, community participation has only meant that poor people contribute in kind or in the form of the provision of labour without active participation in the planning or implementation processes (Jinchang, 1997). The success of meaningful community participation depends on the successful mobilization of communities that can engage with local government and assist it to meet people's needs. Although the mobilization of professionals to participate on a voluntary basis seems a naïve expectation, it could substantially enhance the processes. Building the capacity of these structures is critical. This capacity building should focus on organization building and financial resources (Urban Sector Network, 2001).

The Government of National Unity in South Africa is committed to an integrated rural development strategy, which aims to eliminate poverty and create full employment by the year 2020 (Republic of South Africa, 1995). While the state is committed to infrastructure development, improvement in services and a facilitative environment for entrepreneurial and local economic development, it is up to rural people to make it work for them. The Government of South Africa is committed to basic levels of infrastructure development such as the provision of water, sanitation, access to schools and clinics, road development and provision of energy. All of these will reduce the burden of poverty in rural areas, and allow rural people to invest their time more productively and so contribute to national growth. The strategy emphasizes two processes:

- The need for rural people to set the agenda through the taking of active steps to involve themselves in local decision making through, or with, local government, and
- The accountability of those who draw up proposals for government spending, in service delivery and in infrastructure development, to ensure that funding is well spent through consideration of sustainability, through capacity building of local government and through drawing up and monitoring business plans, based on good information (Republic of South Africa, 1995).

In South Africa, current legislation requires public participation in integrated development planning processes. Community participation was introduced as one of the key activities of developmental local government. Emerging democratic municipalities must work with community-based organizations and non-governmental organizations to establish minimum conditions of good governance and to implement effective development projects.

STAKEHOLDERS IN INFRASTRUCTURE PROJECTS PLANNING AND IMPLEMENTATION

Internationally, several agencies are generally involved with the planning and implementation of infrastructure projects, namely the funding, implementing, and benefiting agencies. However, depending on the nature of the project the stakeholders' list could include other ministries or governmental agencies. On certain projects the community is also considered as one of the main stakeholders. The contractor and the consultant have roles and their contribution may affect relationships on and the progress of project. In most communities, individuals do not have the capacity to understand the difference among needs. The community wants are requests to be provided with all services, whereas needs are the urgent and essential services that are necessary to improve their living conditions. In some areas this is more complex than others and complicates coordination with local authorities, and ultimately leads the municipalities to neglect the communities' needs. The capacity building and awareness is highly recommended to identify the difference between willingness and needs. Wants are the community's requirements for development of necessary projects from their own perspective. Need is the actual necessity of the project; for instance, community is willing to develop water, wastewater and road networks, but the actual need is wastewater network. Messages may be distributed to individuals via mosques, schools and clinics by the communities' committees.

CURRENT PRACTICES AND LEVEL OF INVOLVEMENT

Targeted Agencies

This study deals with several funding agencies working in the Gaza Strip. The initial short list of agencies was modified during the course of the study as some agencies indicated that they were not willing to do so as they considered the issue to be philosophical and therefore confidential to their institutions. The study considers funding agencies and does not include any investigation of local ministries or municipalities. The benefiting agencies, namely ministries or municipalities, indicated their willingness to implement the projects according to the requirements of the funding agencies. Consequently, the funding agencies have the primary responsibility of identifying the stakeholders' relationships and level of involvement.

Level of Involvement (Role of Each Party)

The investigated funding agencies can be classified into two categories in terms of their funding procedures. The first category provides funds through the Ministry of Local Government (MOLG), the ministry allocates and distributes the funds to the local municipalities and finalizes the selection criteria of the targeted project sectors. In this category the ministry is the implementing agency of the projects. The second category targets a specified municipality or Government, the funding agency and the targeted party cooperate closely and prepare a memorandum of understanding, which includes project information and the implementing methodology.

Funding through the Ministry of Local Government

The World Bank is one of the main parties classified under this category. The World Bank

allocated funds to community development projects or emergency job creation projects through MOLG in cooperation with PECDRA as the implementing agency. Community Development Project Phase one and Phase two were implemented (CDP-I and CDP-II). During Al Aqsa Intifada, several emergency projects were implemented and others initiated. These include the: Emergency Response Program (ERSP) and Emergency Job Creation Program (EJCP-DANIDA) funded by DANIDA; Emergency Job Creation Program (EJCP-DFID) funded by DFID, and Emergency Job Creation Program (EJCP-IDB) funded by the Islamic Development Bank.

The methodology adopted for the CDP or EJCP projects required that municipalities propose projects based on the communities' needs and priorities. These were identified by communicating with the communities' representatives in the form of local community committees. Based on a review of various projects' documents and assessment reports the following can be concluded:

- The role of the community in CDP and EJCP projects is limited to the inception phase in terms of (identification and prioritization. The final decision relative to the setting of priorities rested with the respective municipality's Mayor and Councillors. No community role was reported during the other phases of the various projects - design, construction, and operation and maintenance. In certain cases the communities petitioned the municipality regarding the most important project in their area;
- The municipalities and PECDAR ignored the potential role of communities during the identification phase and informed communities regarding the final decision during preparation for field works;
- The communities made a part financial contribution to the CDP projects. However, no financial contribution was made to the EJCP project. On CDP projects, most of the benefiting municipalities only discussed issues with the community representatives, but refused to contribute financially because of the high level of poverty. Thus the municipalities paid the 10% contribution without negotiating directly with the communities to obtain approval of the funding or seeking of alternative sourcing of communities' contributions [EMCC, 2002];
- The municipalities do not have the capacity to find alternative sources for the communities' contributions. Only the municipality of Bait Lahya in Gaza Strip collects US\$ 1 monthly from each household in the form of a surcharge added to water bills. This contribution was collected in a special account and used for the community contribution on the infrastructure development projects.
- All contacts and negotiation with the communities were through the municipalities and there was no direct relationship with the ministry and PECDAR as the implementing agency or World Bank as the funding agency.
- External auditors audited the community satisfaction, contribution, benefits and future willingness. The reports and social audits showed that the community satisfaction with the projects implemented and request more projects, mainly wastewater projects that have the first priority.

Funding directly to the Municipalities

The United Nations Development Program (UNDP) and Save the Children Foundation (SCF) provided funds for the development of local communities directly to the municipalities. There institutions requested municipalities to propose community-prioritized projects in order to achieve a higher level of community satisfaction. The required procedures varied between the

two institutions, which both have different characteristics.

UNDP Projects

- In the period of 1997 to 1999, the UNDP implemented several projects considering the community satisfaction and mobilization before the start of implementation.
- In UNDP projects, no financial contribution was collected from the local communities;
- During the preparation phase, the UNDP and owners in the form of benefiting municipalities signed a Memorandum of Understanding. Under the section 'Operational Management', which lists the responsibilities of the owners, the issue of community mobilization was addressed through the presentation of the project objectives to the general [UNDP, 1999];
- The Public Relations' departments in the respective municipalities were responsible to present the objectives of the proposed projects to the local communities. The UNDP helped some municipalities to establish such departments and provided some assistance to develop staff capacity;
- On UNDP projects, communities were not introduced as one of the partners. However, the communities' acceptance was required to implement the projects and

From 2000 to date, the UNDP did not deem community mobilization as one of their requirements before implementation, but required that the communities accept the proposed projects and address the communities' basic needs.

SCF Projects

- In 1997, the SCF began working with local municipalities on community-based projects. SCF endeavoured to promote community participation in all phases of project implementation, and to develop the capacity of the municipalities in order to achieve this issue;
- Several 'water and sanitation' community-based projects were undertaken in the Gaza Strip and West Bank. The two projects undertaken in the Gaza Strip were implemented in Jabalia and Rafah;
- The evaluated reports and the final presentation workshop of best practices and lessons learned confirmed that the proposed outputs of these projects were achieved;
- The community committees had several roles during the project preparation and implementation phases. These roles were not limited to, but included :
- Participating in the preparing of awareness literature;
- Creating awareness using mosques, schools and clinics, and
- Facilitating communication with individuals, which helped to ensure smooth implementation of the project;
- A direct impact of the project and the methodology of implementation is that the capacity of the community committees and the municipality has been improved. The successful completion of the project has convinced the municipality of Rafah to adopt the community-based approach in its policies. The municipality of Rafah adopted the community-based methodology in projects executed by other agencies;
- Community committees' capacities were enhanced through their experience gained on the project, through communicating and the development of networking skills. Community committees made several contacts with other donors in order to implement projects in their areas and to achieve the integration of services. In general, the project have strengthened the links between community committees and other stakeholders;

- Community committees, men groups, women groups, and a child-to-child approach was adopted to communicate the project objectives and to increase the level of public acceptance and awareness, and
- The financial contributions were collected from the local communities after the awareness sessions and facilitated through continuous contact with community committees. Other community members covered the contributions of poor families. This is as a result of an understanding of the importance of the project and the role of the communities during the project phases.

Municipal opinions about community-based projects

Key municipal persons asked about the community-based projects said that, municipalities were not able to implement the projects smoothly because of the difficulty encountered in realising consistency amongst people or their representatives. Essentially consultation with and promotion of contributions by communities is only really possible during the identification and prioritization of projects. Involvement by communities during the implementation phase was also discouraged / or not welcomed because it would complicate project design and implementation [EMCC, 2002]. This was perceived to be attributable to a lack of experience in dealing with the community and implementing communities and their needs. Despite other key municipal persons having indicated their willingness to increase the level of community involvement during project implementation, during the actual implementation they neglected the communities' role.

In general the community contribution was welcomed and appreciated during the first stages of project development on CDP and EJCP projects. Some of the funding agencies consider the community as main project partners and that they should be involved in all the phases. With regard to the maintenance of projects, ultimately people's lack of interest and unwillingness to participate in maintaining the projects' services is merely a manifestation of their exclusion from all the processes of CDP projects. Furthermore, the municipalities in most areas did not prepare maintenance plans.

PROPOSED METHODOLOGY OF COMMUNITY-BASED PROJECTS

Based on an understanding of local community structures and the reviewing of the reports of different projects that were implemented using different methodologies a community-based methodology can be proposed. Before formulating a new approach, the following steps are proposed:

- The promotion of community participation should be during the planning, implementation, operation, maintenance and evaluation phases;
- The selection of a contract types should suite the community-based approach;
- Developing the capacity of municipalities to deal with community based projects;
- Adopting of community-based methodologies in the policies of municipalities, and
- Finalising the responsibility matrix including the community responsibilities during the first phases of the project development.

Figure 1 indicates the proposed approach and components relative to the agencies and project phases. The proposed approach strives to increase the participation of the community during all

phases of projects. The approach can overcome the conflicts and misunderstanding within a community. It also establishes the necessary linkages with local government - the key objective is to include people in the process of policy-making and influencing how resources are to be used. Community participation can also generate a sense of responsibility and ownership, which increases a community's confidence in controlling its destiny and improves the sustainability of the development program.

For households to be fully involved, they must be fully informed, and their views and participation built into the program from an early stage. However, as with communities, it is important to recognize that all householders are not the same. Therefore, generalizations should be avoided. There is a difference between behaviour and attitudes of peoples in cities, villages or camps. The policy should aim at providing alternative choices and options to households that can then decide which they want, and increasing public awareness and capacity building in order to increase the level of interest amongst the people and their capacities. Levels of community participation may vary in the implementation of projects, depending on the technical and managerial capacity of the community, community committees and individuals.

Ignoring a community's comments and complaints during the implementation of projects is considered the main cause of lack of cooperation and trust between people and the municipality's staff and the project contractor. It is recommended that municipalities should reshape the people's understanding of the municipality's role and capacity and then develop new mechanisms to engender trust and transparency in relation with the community. One of the proposed methods to increase the level of community contribution is through appropriate selection of contract types [Jinchang 1997]. Work may be contracted out to small and micro construction firms, either in the formal or informal sector.

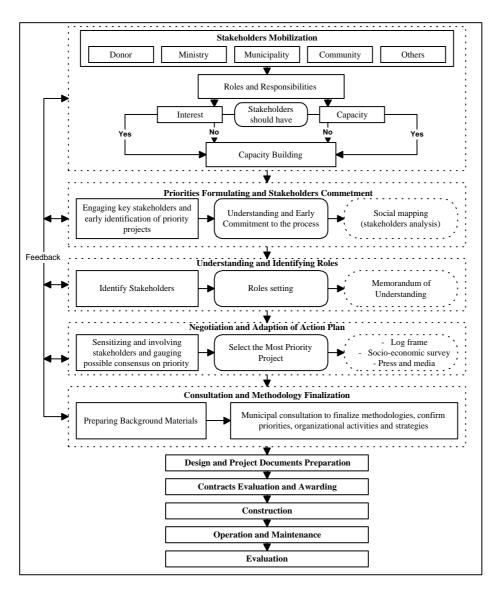


Figure 1 A proposed methodology leading to the adoption of communitybased procedures in the Gaza Strip municipalities.

CONCLUSION AND RECOMMENDATIONS

The conclusions of the study are listed below:

- 1. The policies regarding community involvement in the identification of priorities and other phases of projects are neglected and / or not prevalent in most municipalities;
- 2. Some funding agencies require community participation during the different phases of projects as a pre-requisite for funding. Others view community participation as an

operational management issue and leave the responsibility of execution to the municipality without monitoring;

- 3. Key municipal persons indicate willingness to increase the level of community involvement during project implementation. However, during implementation they neglect the communities' role;
- 4. Municipalities exposed to community-based projects understand the importance of a community's contribution and the importance of making individuals aware of project objectives and the proposed methodology to achieve them. The communities' committees contribute to solving conflicts with individuals and liaise with communities to facilitate the implementation of projects, and support for the implementation agency;
- 5. The involvement of communities during project development ensures smooth implementation and facilitates coordination during construction. The objectives and proposed outputs of projects were achieved on the respective community-based projects, and
- 6. Community based projects enhance cooperation amongst people and ensure the collection of communities' contributions.

The following points are recommended:

- 1. The municipalities of local government should be involved and participate in any development activity and the development of methodologies for project implementation. This should avert conflicts between proposals submitted by municipalities to different funding agencies and to ensure the implementation of projects and their methodologies coincide with Ministry policies and regulations;
- 2. Contracts should be amended to promote increased community contribution;
- 3. For households to be fully involved, they must be fully informed, and their views and participation built into the program from an early stage;
- 4. Post project workshops should be conducted to present the lessons learned and communicate best practices;
- 5. Cooperation between donors is recommended and enhancement the communities should be empowered to deal with donors and other agencies;
- 6. Municipalities should reshape people's understanding of the role of municipalities and their capacity and develop new mechanisms to develop trust in the community and to promote transparency. This can be achieved by public meetings with communities, and periodic meetings with communities' committees to determine community requests and urgent needs;
- 7. Capacity building and awareness is recommended to determine the difference between willingness and needs. Messages can be communicated to individuals via mosques, schools and clinics by the communities' committees;
- 8. The budget allocated for the awareness activities should be maximized with special focus on communities' committees, men, women and children, and
- 9. Further training should be arranged for municipalities' staff on how to prepare a communitybased project document.

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REFERENCES

- Consultation on Opportunity Bonds and Tax-incentive Zones, Better Ways to Support our Communities: Consultation Paper on Jobs and Opportunities Bonds, Toronto, 2000.
- Engineering and Management Consulting Centre (EMCC), Social Impact Assessment of Small Scale Projects In the Gaza Strip (CDP II): Final Report, Presented to PECDAR, Gaza 2002.
- Engineering and Management Consulting Centre, Final Report of the Emergency Response Program (ERSP) Granted by the World Bank - Gaza Component, Gaza, 2002.
- Engineering and Management Consulting Centre, Rafah Water and Sanitation Project: Final Evaluation Report, Presented to Save the Children Federation, Gaza, 2002.
- Jinchang, L., Urban Employment Guidelines Employment-Intensive Participatory Approaches for Infrastructure Investment, Geneva, 1997.
- Memorandum of Understanding between the United Nations Development Program (UNDP) and the Municipality of Gaza: Renovation of North Remal Neighborhood in Gaza City, signed by the two parties on 1999.
- Republic of South Africa, Ministry in the Office of the President, General Notice -1153 of 1995- The Rural Development Strategy of the Government of National Unity, Pretoria-South Africa, October 1995.
- United Nations Centre for Human Settllemnts (Habitat), Tools to Support Participatory Urban Decision Making, Urban Governance Toolkit Series, 2001.
- UNDP, United Nation Development Program, Operation and management for Palestinian projects, UNDP, Gaza, 1991.
- Urban Sector Network, Community Participation in Integrated Development Planning: Case Study Guidebook for Councillors, Officials and Development Practitioners, South Africa, 2001.