



## Community involvement in local area maintenance

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LOCAL AREA INFRASTRUCTURE maintenance and environmental management are vitally important activities that are essential in order to maintain acceptable living conditions, and they also have the potential to contribute to local development. Local area infrastructure maintenance and environmental management have, however, been much neglected by many local authorities in South Africa. For example, millions of rands worth of infrastructure in KwaZulu-Natal faces deterioration because of a lack of routine maintenance ("Infrastructure at Risk of Becoming Worthless", *Daily News*, 1 June 1995). This is partly because maintenance activities are often not adequately taken into account when projects are planned, and are underbudgeted for in comparison to capital expenditure on new infrastructure.

Local authorities in South Africa are assigned a wide range of responsibilities. In the South African constitution, the objects of local government include the following:

- To ensure the provision of services to communities in a sustainable manner.
- To promote a safe and healthy environment.
- To encourage the involvement of communities and community organisations in the matters of local government.

Local authorities therefore need not only to effectively undertake infrastructure maintenance and environmental management, but need to ensure, where appropriate, that these activities contribute to local job creation, community empowerment, and so on. This can be best achieved by involving community members in infrastructure maintenance and environmental management activities in their areas.

Many maintenance tasks are well suited to labour intensive methods and the involvement of members of the community. Possible tasks that could be performed by community members, depending on the size of the area and their skill levels, include:

- Minor road and stormwater drain maintenance (Cotton and Franceys, 1991; Davidson, 1993).
- Water and sanitation: minor repair of water mains, emptying of pit latrines (Cotton and Franceys, 1991).
- Environmental management: refuse collection, transfer of refuse from neighbourhood collection points to centralised collection points, street sweeping, trimming and cleaning of road verges and public open space (Cotton and Franceys, 1991; Furedy, 1992; UNCHS/ILO, 1995).

The involvement of local contractors and/or community based organisations could contribute towards providing an improved service and furthering local development in the following ways:

- Greater responsiveness to community needs.
- More affordable and efficient service: where the community is involved in maintenance, a strategy of limited preventative maintenance can be adopted, which can have a significant overall impact (Arlosoroff et al, 1987).
- Creation of local income generation/job opportunities.
- Capacity building/development of skills: the training of people from the community will enrich the skills base of the community.
- Community empowerment/self-reliance.

### Maintenance models

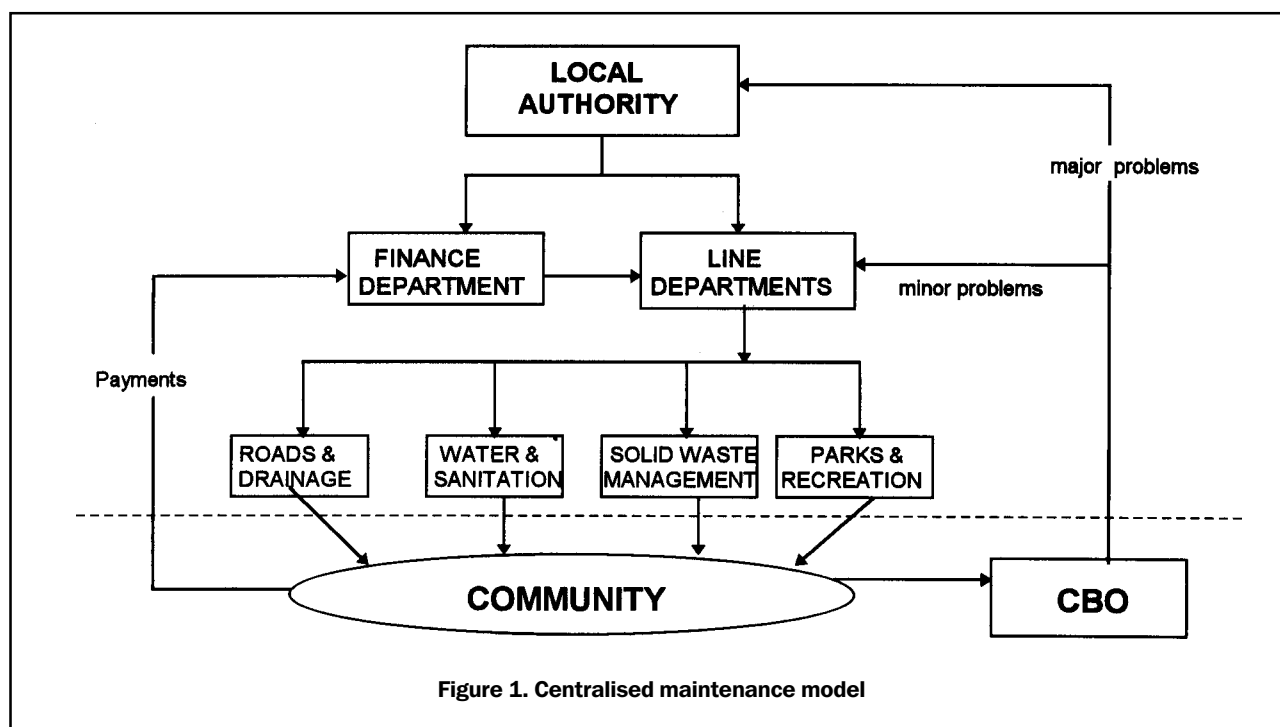
There are many ways in which infrastructure maintenance and environmental management activities in an area can be organised. Maintenance systems can be characterised as a continuum ranging from complete control by external organisations with little local involvement to total community management with little external involvement. Three broad types of maintenance systems, based on the typology formulated by Arlosoroff et al (1987), are discussed:

- Centralised maintenance model: where infrastructure maintenance and environmental management is undertaken either directly by local authority line departments or, especially in the case of refuse removal, is contracted out to large private sector contractors (Figure 1).

A centralised maintenance system is capable of efficiently providing a high level of service where there is sufficient capacity and sufficient funding, and is necessary for complex types of maintenance, such as sewer maintenance. The problems of this type of maintenance include lack of local authority capacity, inadequate cost recovery, cost inefficiency due to inadequate inspection and preventative maintenance, a lack of accountability and responsiveness at grass roots level, and a lack of community self-reliance.

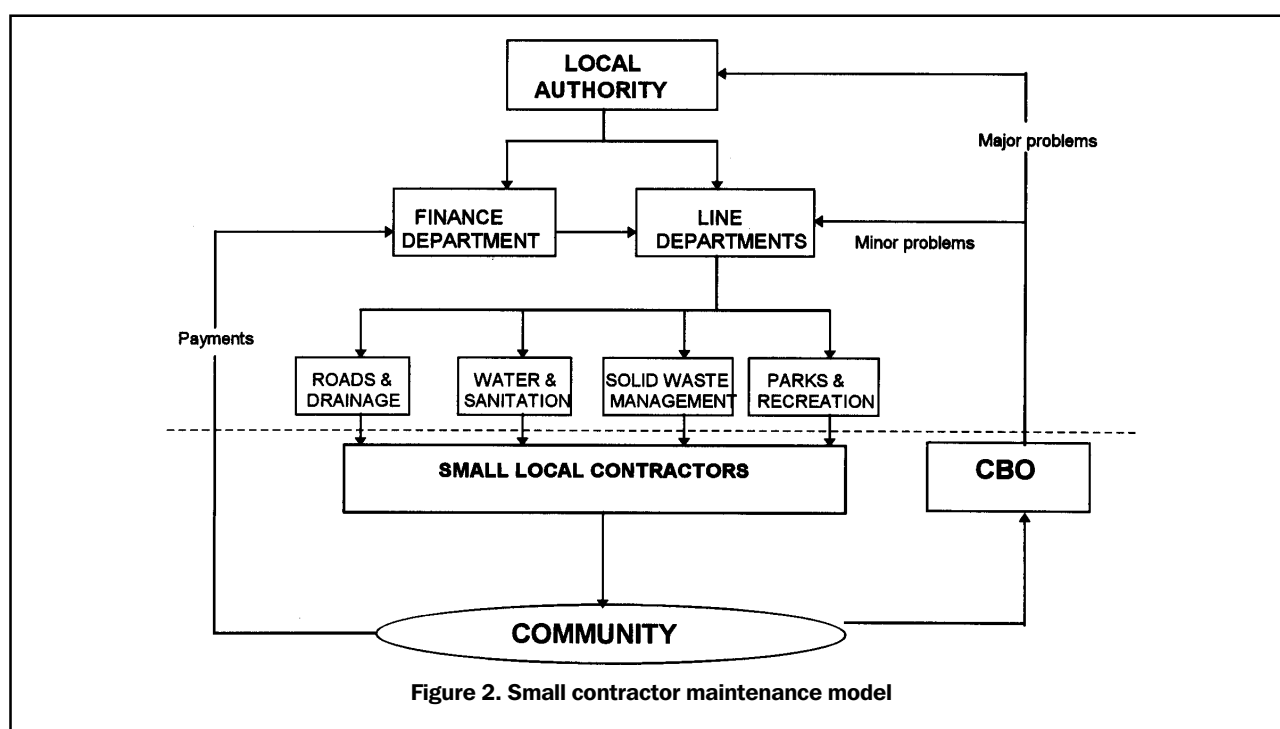
- Small contractor maintenance model: involves the local authority employing small contractors from the community, or from neighbouring communities, for certain maintenance tasks (Figure 2).

The main advantage of the small contractor maintenance model is that employing community members in



the labour intensive maintenance of their area would result in the creation of local employment opportunities. In addition, small contractors and informal sector operators have low overheads which might make the service more affordable (UNCHS, 1990). In terms of disadvantages, however, the system would still be centrally controlled and the community would still largely be unable to influence the process.

- Community based maintenance model: where a community based organisation, in partnership with the local authority, manages one or more of the maintenance tasks in an area. The community based organisation could take the form of, for example, a community based trust, with representatives from the civic association or residents committee, and possibly from the local authority as well. The community based



organisation may need to employ administrative and management staff, and could either contract out to local contractors or could directly manage community based maintenance teams.

There are community based organisations in South Africa which have played an important role in undertaking development projects in their area, and which could potentially play an important role in undertaking the subsequent infrastructure maintenance and environmental management in their area. The success of community based maintenance would depend on the community based organisation having adequate organisational capacity.

The theoretical arguments in favour of community management of maintenance are numerous. One argument is that community based organisations are “ideally placed to undertake the day-to-day implementation of policies affecting their neighbourhoods, to act as intermediaries between individuals and the local authority” (UNCHS/ILO, 1995: 12). A study of slum-dwellers in the Philippines (Douglas, 1992) has shown that residents prefer community based assistance programmes to external assistance because of better and faster services, and the maximisation of income-generation opportunities

Local government would still have an essential role to play in a community managed maintenance system. Firstly, the local authority or other outside agency would still be required to deal with tasks and problems that would require specialised skills or equipment. Secondly, local government support in the form of training and monitoring for the community based organisation will be necessary.

There are a continuum of options for community management of maintenance. The two main variables are whether or not the relevant community based organisation is responsible for the management of materials and for financial management and the collection of user charges. Peattie (1990) points out that there is a conflict of interest inherent in expecting a community based organisation to both collect user charges and represent community interests and solidarity at the same time. Figure 3 shows a community based maintenance system in which the local authority is responsible for materials management and the collection of rates and service charges.

### Conclusion

The maintenance models in this paper need to be utilised as options to be workshopped with the relevant stakeholders in any particular situation. No model is inherently better or worse than any other - each of the models may be the most appropriate for specific contexts. In general, however, the various models would usually apply in the following cases:

- i) Centralised maintenance model: most appropriate for specialised services, such as sewer maintenance and major road, drainage and water supply maintenance.
- ii) Small contractor maintenance model: appropriate for refuse removal, street sweeping, maintenance of public open space, and minor road and drainage maintenance.
- iii) Community based maintenance model: the community management of one or more of the maintenance activities listed in ii) above may be appropriate in areas

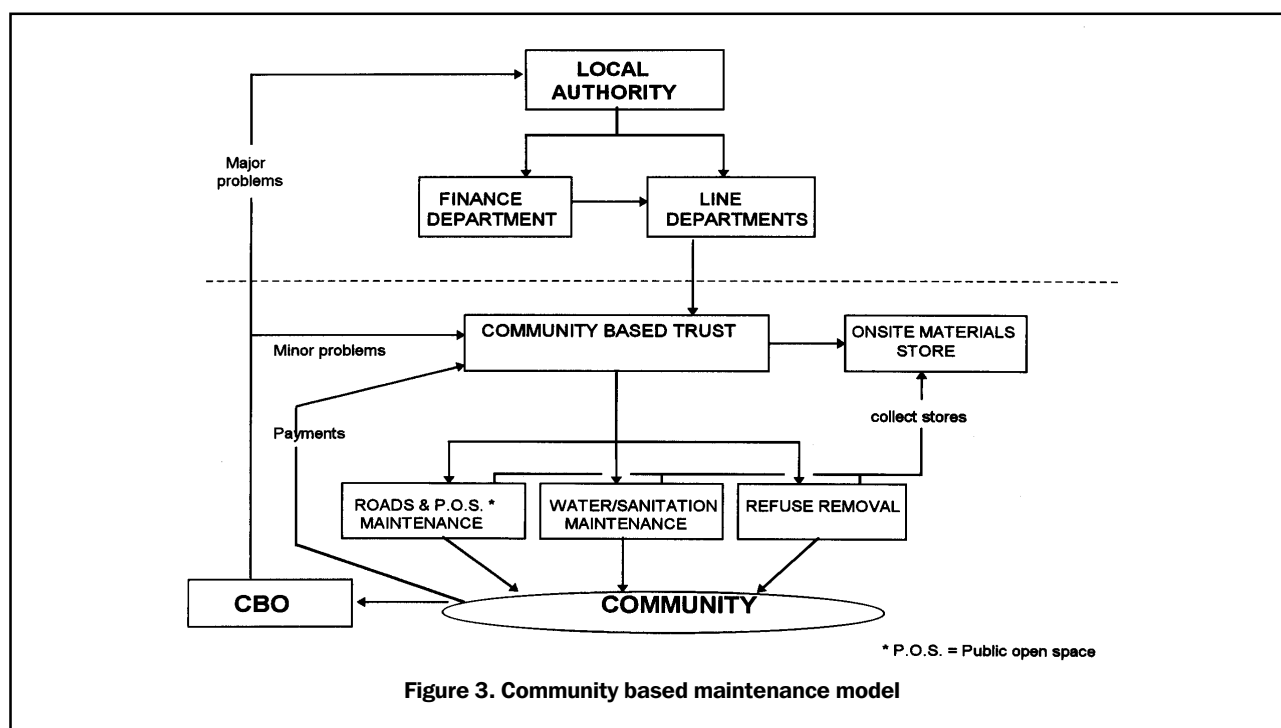


Figure 3. Community based maintenance model

where there is a strong community based organisation that has played a leading role in implementing development projects in the area.

Ultimately, the effect of increased community involvement in infrastructure maintenance and environmental management in their local areas would be to further local development in those areas while simultaneously enhancing the quality of life for all.

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