

This *Key Sheet* series is designed to brief government and donor staff involved in providing infrastructure facilities and services intended to benefit poor people. The sheets focus on the links between cross-cutting development issues and decision making. The series covers five topics:

1. Decentralisation
2. Disaster Management
3. Land Tenure
4. Social Exclusion
5. Employment

The aims of 'pro-poor' infrastructure provision are two-fold:

- to meet the basic service needs of poor people; and
- to contribute to improved livelihoods for poor people by enabling them to participate more fully in the economic, cultural and political institutions of society.

Pro-poor infrastructure includes both providing new facilities and related services to poor people, and improving the accessibility of existing facilities and services. Issues of design, pricing, and access rights are important.

These *Key Sheets* focus on shelter and buildings, water and sanitation, and transport. Energy and information and communication technologies can also be important.

Each *Key Sheet* provides an overview of the topic, then highlights the key issues in decision-making, illustrated by practical experience from Africa, Asia and Latin America. Key literature, websites and sources of expertise are given at the end of each sheet.

**T**HIS KEY SHEET discusses the implications of decentralisation for pro-poor infrastructure provision, and the role of infrastructure provision in effective decentralisation. Decentralisation refers to the transfer of political power, decision-making capacity and resources from central to sub-national levels of government. It embraces:

- **Deconcentration** The transfer of the implementation of policies decided at national level to local offices.
- **Delegation** The limited transfer of decision-making over funding and policy to local governments acting as agents ultimately responsible to the central government.
- **Devolution** The transfer of resources, responsibility and decision-making to the local level.

Many factors, including the size and population of a country, its geographical and ethnic diversity, and historical precedent, influence the combination of policy reforms that will achieve effective decentralisation. Deconcentration and delegation can make some contribution to the goals of accountability, transparency, popular participation and strengthening of the democratic process, but in practice the political, administrative and fiscal powers of local bodies are limited. Even so, simply by strengthening national-local links, these 'intermediate' forms of decentralisation may (there is little hard evidence as yet) contribute to improved national planning and implementation of infrastructure provision, and be a first step on the road to full-scale devolution. Devolution is the form of decentralisation perceived as basic to effective pro-poor policy interventions at the local level, and referred to in this Key Sheet except where specified otherwise.

For decentralisation to be successful, the shifts in control over and responsibility for resources, and the development of new lines of accountability, must be managed responsibly and with genuine political will on both sides. Specifics vary enormously from case to case. The process of shifting control and responsibility may involve local and central governments bargaining with one another, perhaps within a framework of principles agreed in a new national constitution.

## Decentralisation and infrastructure provision

The direct provision of infrastructure services by the central state often fails to take into account the geographical and social diversity of requirements and capabilities. It has few incentives for cost control; it uses highly trained and therefore expensive technical staff; and it involves over-complex technical specifications (Martinussen, 1997). This tends to disadvantage poor people disproportionately. Urban and higher-income areas often receive coverage before rural and low-income areas. Inefficient services are costly, so demand an unnecessarily high proportion of poor people's income, or are beyond their reach altogether.

In theory, decentralisation can help in a number of ways:

- Local governments are better informed about local needs, and are more sensitive to them. They should therefore be able to provide more appropriate infrastructure than the national government.
- Local people – including otherwise excluded groups – can be more closely engaged in decisions about infrastructure provision because they have a stronger political voice at the local level.
- Local providers can be made more accountable to local people.
- In centralised systems, separate line ministries deal with the different forms of infrastructure. In decentralised systems, co-ordination by local government agencies allows greater capacity for horizontal, 'integrated' planning.

## Pitfalls

Pitfalls relate both to the nature of the decentralisation process itself (first five points below), and to the characteristics of certain services (last three points):

- Decentralisation can lead to increased levels of corruption and the entrenchment of local political elites, when political power and financial resources are transferred into structures without democratic accountability.
- Increased powers of local governments can conflict with the activities of neighbourhood groups in urban areas, or with traditional common-property regimes in rural areas (although these may not be pro-poor themselves).

### Box 1 Water sector reform in the context of decentralisation in South Africa

The South African water sector underwent extensive reform in the 1990s, culminating in the 1998 National Water Act. The Act aimed to establish a national water reserve and to simplify management of the country's water resources. Responsibilities were divided between three levels of government:

- **National** Water allocation at national level, including transfer between catchments, and international questions. The guiding criteria are public interest, sustainability, equity and efficiency.
- **Provincial** Allocation of water to different stakeholders: domestic, industrial, agricultural, power-generation etc., and ensuring the effective participation of all stakeholders.
- **District/local** Representing the interests of the range of users, and water supply – although where this function is poorly performed, the Department of Water Affairs and Forestry may step in.

South Africa has been divided into 19 Water Management Areas. Catchment Management Agencies (CMA) are mandated to operate within the above framework to supply bulk treated water on a commercial basis. Each CMA is charged with developing and implementing a catchment-management strategy through delegated institutions. The aim is to increase the scope of CMAs to meet demand, whilst ensuring far greater public participation in managing water resources. The CMA may devolve certain aspects of water management at the local level to Water Users' Associations (statutory bodies established under the Act).

These reforms have been successful in bringing local stakeholders into the water-management process. However, the water environment in South Africa is complex – due principally to a large discrepancy in supply and demand at the national level. Whether local stakeholders will be able to manage effectively in this context remains to be seen, especially as it is not yet clear whether the devolution of responsibility will be accompanied by devolution of budgets.

*Source: Nicol, pers. comm.*

- Local agents may not have superior local knowledge if they never visit the poor areas of their city or rural district.
- Local governments, especially in poorer rural areas, often lack the resource base (both human, in terms of appropriate skills, and financial) to provide high-quality services. Increasing local taxation can lead to mobile capital fleeing to other regions.
- Horizontal co-ordination can be a problem where local governments maintain vertical distinctions between different service sectors.
- Some forms of service provision tend to be more cost-effective if provided on a large scale (e.g., water networks, energy production).
- Infrastructure provision requires specific technical and managerial skills which local government administrative staff may lack.
- Natural user areas of infrastructure services often do not coincide with local administrative boundaries. Neighbouring local government units (city wards, municipalities, regional governments) may fail to co-ordinate adequately. A classic example is urban transport in Mexico City: there is very limited co-ordination of transport services in the Metropolitan Area, which covers the Federal District and more than 30 surrounding municipalities.

The contribution of decentralisation to pro-poor infrastructure provision varies from service to service and from context to context. For example, economies of scale in the *provision* of main roads, electricity generation and water networks in situations of overall scarcity mean decentralised provision will be less efficient. For local earth roads and water supply in situations of relative abundance, on the other hand, decentralised provision may be efficient and may have knock-on pro-poor impacts (e.g., construction through food-for-work schemes). Decentralised delivery of infrastructure *services* (e.g., transport services, water supply) may be efficient in many contexts, and better able to target poor people's needs. However, care is needed in identifying the appropriate form of cost recovery to ensure that it does not exclude poor people.

For decentralised infrastructure provision to work effectively, especially for the poor, local governments must work with central government on some issues (overall strategic planning, resource raising, and training). Appropriate levels of decision making within the government hierarchy must be agreed, and the roles for each level must be clear (see Box 1). In terms of financing and control, local governments may have to look at alternatives to direct implementation of infrastructure services where they have no comparative advantage, and may have to withdraw to a regulatory role.

Local-level provision of infrastructure services can increase users' political support for decentralised government by ensuring that the services provided are more appropriate to local users' needs, and by clarifying lines of accountability for quality standards. But does this mean decentralisation will have a positive impact on poverty alleviation? This depends on the extent that poor people have an effective voice for making their infrastructure needs felt.

Local-level provision can also contribute to effective decentralisation by generating revenue from charges for services, so strengthening the fiscal base of decentralised government. However, this depends on users' being able to pay, and on effective revenue-collection systems being in place.

### Box 2 Successful needs identification in India

A central focus of the Calcutta Slum Improvement Project has been the direct participation of community-based organisations in the identification of service needs and in deciding on infrastructure location and characteristics. Municipal officers receive training and then help organise local committees in slum areas. Public meetings are used to consult the committees about their needs and requirements. This process has improved the municipal officers' understanding of local conditions. It has also improved local environmental conditions and empowered poor groups, especially women's committees, who are given a central role.

Source: Wakeley et al. (2001) p. 171

### Box 3 Alternative water supply solutions in Guatemala

To overcome financial limitations, SAPHI, a local NGO, developed a water-supply programme based on tapstands shared by up to 10 houses. However, the system was designed as flexibly as possible to allow local communities to expand the network in the future without having to reconstruct it completely.

## Key issues in decision-making

Encouraging participation of poor people should be a priority at all stages of decision-making, from needs identification to maintenance and monitoring. Participation can improve the relevance and efficiency of the services provided, empower minority groups and communities, connect disparate communities with shared interests, and strengthen the democratisation process.

### Needs identification

It is vital that poor people participate actively in identifying needs. This process should cover their preferences, their potential contribution to construction and operation, and opportunities and constraints within existing formal and informal systems (*World Bank PRSP Sourcebook*, chapter 3). Variations along ethnic, gender and geographical lines must be taken into account. Sectors of the local community that are excluded may become alienated; it can be more constructive to encourage the community as a whole to recognise the need to help the poorest. For example, this has been achieved in Belo Horizonte, Brazil, by setting up a City Forum involving all social classes.

The decentralisation of infrastructure planning can increase transparency and accountability in the needs-identification process, by preventing local elites not fully committed to the welfare of the poor from dominating the process. This was traditionally achieved in China by sending bureaucrats to work in other parts of the country where they had no vested interests – though such an approach counteracts the advantage of local knowledge, and may stimulate barriers between government agencies and the local population. Involving community organisations directly is another approach (see Box 2).

Conventional majority voting on the expenditure of public funds does not necessarily represent minority needs. Participatory budgeting is a way to tackle this problem (Fozzard 2001:17). In Porto Alegre, Brazil, for example, government workers set up consultation forums with citizen groups, and were surprised to find that the population's infrastructure priorities were quite different from what they had expected. The political will to involve citizens in the decision-making process, together with training of employees in consultation techniques, resulted in more efficient and better-targeted public expenditure. Training and capacity building for community groups was also vital in this process.

The use of inappropriate or out-of-date international technical standards can be a significant constraint to the effective provision of pro-poor infrastructure services. Local government is uniquely placed to liaise with end users to identify appropriate technical specifications. But in order to do this successfully with poor people, it must:

- **Overcome the concept of 'one size fits all'** Allow for varied technical specifications for different consumer bases (e.g., bicycle paths, footbridges and safe pedestrian paths as well as motorways).
- **Consider alternatives to standard solutions** For example, water supply does not necessarily mean supply to every house or to none at all, which can permanently exclude poor areas from service provision (see Box 3).
- **Ask design questions that focus on poor people's needs** How does the design affect affordability? Is the price/quality ratio reasonable according to local standards? How does the design affect poor people's access?
- **Consider maintenance issues** Is the technical specification appropriate if communities are expected to participate directly in management and maintenance? For example, are water pumps made in-country? Are spare parts available easily? Suitable technologies must be considered, in conjunction with the primary stakeholders, during the planning phase.

### Delivery systems

There is a wide range of options for delivery of decentralised infrastructure facilities and services. Care is needed to ensure that the system chosen does not discriminate against poor people.

Difficult terrain and low population densities can make local low-tech provision of infrastructure facilities very effective (for example, micro-hydro for power generation). But **local government** may not be the most appropriate implementing agency: there may be no officers with the relevant technical knowledge; problems may exist with financing; and authorities may operate in traditional bureaucratic modes. Alternatives include **social funds** – second-tier agencies that appraise, finance and supervise the implementation of investments identified by other actors as benefiting poor and vulnerable groups. These have been successful in creating facilities on the ground. But there are questions surrounding the representativeness and management capacity of the intermediaries, and the subsequent impact of social fund investments on poverty (World Bank, 2002).

#### Box 4 Public-private partnerships for housing and infrastructure in Angola

The Luanda Sul Self-Financed Urban Infrastructure Project combines private-sector resources and skills, and public-sector management, to provide essential housing and infrastructure for a range of income groups, especially refugees from the civil war.

Low infrastructure investment and high urban growth in Luanda due to the civil war have led to serious shortages in housing and basic services. The Luanda Sul project, started in 1995, encourages private investment in housing-related infrastructure in three new residential zones where the government is building low-cost homes. Fundraising powers for social projects were devolved to the regional government, which raised funds through sales of land titles to private companies, and through taxes and tariffs. Development land is passed to private companies in exchange for a commitment to investment in infrastructure and services.

To date, there has been a total investment of \$96m, and more than 800 hectares of land have been provided with drinking water, drainage, electricity, community facilities, a hospital, schools for 25,000 people, as well as commerce and industry providing 4,000 new jobs. Initial distrust of a programme seen as 'giving land away to private companies' was overcome when people realised the social benefits. The initiative is now spreading to other cities in Angola.

*Source: Wakely et al., (2001) p. 157*

Increasing government officers' and community groups' knowledge and understanding of technical alternatives can be helpful, but it is unrealistic to try to provide local expertise in cutting-edge approaches across the range of infrastructure provisions. Alternatives include technical assistance from international development agencies, and contracting-out parts of the infrastructure-design process to the **private sector**. Research suggests that private-sector involvement has great potential for technical innovation (Warner, 1998).

In many other contexts, there are economies of scale from providing infrastructure facilities on national grids (e.g., power generation, rail networks). Even so, the cost can be prohibitive for the national government acting alone. **Public-private partnerships** (PPPs) have a role here, as either Build-Operate-Transfer (BOT) or Build-Operate-Own (BOO). The growth in joint public-private ventures, in which aid agencies facilitate international private capital flows, is opening new opportunities to influence the level and quality of public participation within infrastructure projects. Research shows that participation may benefit commercial interests by increasing the security of investment and reducing opposition (Warner, 1998).

There may be a bigger role for decentralisation in the delivery of infrastructure *services* that poor people can access, because it can ensure services are tailored to local conditions and can reduce overhead costs. But again, direct operation of services by **local government** may not be appropriate, for the reasons outlined above.

**Public-private partnerships**, in which the private sector provides financial and administrative resources and local government plays a monitoring and regulatory role, have the advantages of efficient service provision and payment collection, and adaptability to customers' needs (from their demand-driven approach), as well as local employment creation (see Box 4). When local government regulators stipulate that

poor people must benefit from infrastructure investments, this can stimulate the development of techniques by the private sector to reduce the cost of connecting households to infrastructure networks and thus increase access. For example, in El Alto, Bolivia, private water providers have discounted connection fees, and initiated 'sweat equity', micro-credit, and flexible technical standards to achieve affordable water connection for the poor. As a result there is currently a strong tendency for local governments to form PPPs.

However, there are problems. Costs of services are typically higher than those of public services (but normally because of the lack of subsidies), and standards can fall without regulation. Economic and political instability frightens off potential investors (see Box 5). Local governments often lack skills in negotiating and managing the partnerships, and suffer from rapid turnover of staff. Although poor people might be expected to benefit through more efficient and extensive services resulting from PPPs, they still rarely play any direct part in contract negotiation or ongoing management. All this implies the need for institutional reform in local government to encourage longer-term planning horizons, and for capacity building in negotiating and managing PPPs.

Contrary to popular perception, if local government is sensitive to communities' requirements and capabilities, there is no reason why community management of services and resources cannot be complementary to, or even combined with, PPPs. For example, in Buenos Aires and Manila, water-connection charges have been reduced as a result of public-sector oversight of private-sector management, directly benefiting 260,000 and 400,000 poor consumers respectively.

#### Cost recovery

Cost recovery is a central issue in pro-poor infrastructure provision. Installation and maintenance costs for national infrastructure facilities can be very high, so attempting full cost recovery from users can overturn the redistributive principle of pro-poor service provision and highlight the role of small-scale, lower technology solutions.

### Box 5 Public–private partnerships for water and sanitation in Zimbabwe

Structural adjustment helped to devolve authority to municipal authorities in Zimbabwe. By 1997, Gweru City Council realised it could no longer deliver adequate water and sanitation services to residents. Private-sector involvement was a commercial possibility because, unusually, the city already had a water and sewerage network serving nearly all households. So preparations were made for establishing a concession, including capacity building, consultative processes and team working. Problems to be overcome included a culture of non-payment and no viable regulatory framework for water standards.

Unfortunately, deteriorating exchange rates, power cuts and chronic political instability frightened off potential private operators, and the future of the initiative remains uncertain.

Source: Plummer and Nhemachena (2001)

Different services require different forms of cost recovery. Services which benefit households, such as water and electricity, can be metered. Services which provide public goods, such as roads and garbage disposal, have to be financed by means of taxes or property charges.

Unless cross-subsidies or intergovernmental fiscal transfers are involved, subsidising services is costly, and untargeted subsidies often disproportionately benefit higher-income groups, because they normally have greater access and higher usage. The principle that users must pay for most services is now broadly accepted. Even poor people are willing to pay for essential services (and normally do so already), especially if the service conforms to their needs. For example, in many parts of rural Africa peasant farmer organisations contribute to the cost of road improvements, which will provide them with savings in transport costs (*World Bank PRSP Sourcebook*, chapter 2).

Options for equitable cost recovery include:

- **Flexible billing systems** These allow for poor people's immediate problems of daily budgeting.
- **Metering and 'increasing block tariffs'** Property-based tariffs often mean that richer households pay substantially less per unit consumption than poorer households. This can be overcome in the case of electricity and water through the use of metering and increasing block tariffs, where a survival level of consumption is charged at a low rate, with subsequent increases in consumption being more highly charged. This targets subsidies to poorer households and reduces the total cost of the subsidy by 'cross-subsidising' from richer to poorer households.
- **Location-specific cross-subsidisation** For example, the privatisation of the Buenos Aires Metro meant public funds were no longer needed for operating costs and could be used to provide subsidies. Maximum tariffs were set by the municipal government, to guarantee access to the poor. In order to ensure efficiency, concessionaires interested in running the system bid for minimum subsidies (*World Bank PRSP Sourcebook*, chapter 2). However in services such as water supply this approach can be problematic (for example, where multi-occupant, single-metered properties pay high rates); subsidies for connection rather than consumption may be an alternative. In Guatemala, the microcredit provider Genesis Empresarial concentrates on providing credit, together with training, to low-income communities, with a focus on rural electrification. Tailoring the loans to suit the local context, and making groups responsible for repayment, mean that loan-recovery rates are high and ensure the long-term sustainability of the programme – which has been running since 1988 (*World Bank PRSP Sourcebook*, chapter 1).

#### Capacity building

Effective decentralisation requires capacity building for all local stakeholders. Local conditions determine the details: they may include training of existing staff, incentives for trained civil servants from elsewhere to relocate to local levels, and increased support from central agencies.

If sufficient capacity is not built among staff, or if these skills are not bought-in, decentralisation of infrastructure provision may result in inefficiencies, failures, and increased costs. Training for relevant local government staff needs to include participatory planning approaches, gender awareness, poverty identification and measurement techniques, surveys of policy preferences, and direct consultations.

The role of local government is often in regulating services provided by others (see Box 6). This requires local government staff to be trained in:

- **The operating principles of the services** – so that staff can effectively monitor performance.
- **Poverty reduction and sustainable livelihoods approaches** – so that staff can monitor the impact of the services on poverty alleviation. This includes both the dimensions of poverty to be tackled and the target groups in terms of location, gender, ethnicity, etc.

It is also relevant to build capacity within communities themselves, by:

- **Training community groups in the operating principles of the services** In the Calcutta Slum Improvement Programme (see Box 2), women's committees were trained in water and sanitation systems. As a result, they were able to intervene to improve aspects of the service during installation.
- **Involving communities in the debate around the importance of targeting the poor** This can reduce resentment against the poorer sectors of the community, if they are receiving special attention. For example, higher-income groups can be encouraged to participate in targeting, and to see it as beneficial to the whole local area.

### Websites and expertise

- Development Planning Unit, University College London  
www.ucl.ac.uk/DPU/
- Intermediate Technology Development Group  
www.itdg.org/home.html
- International Institute for Environment and Development (IIED). Online discussion and publications, including the journal *Environment and Development*.  
www.iied.org/index.html
- Loughborough University, Water, Engineering and Development Centre  
www.lboro.ac.uk/departments/cv/wedc/
- UNDP Public Private Partnerships for the Urban Environment  
www.undp.org/pppue/
- World Bank PRSP Sourcebook  
www.worldbank.org/poverty/strategies/chapters

### Box 6 The Local Government Infrastructure Fund in the Philippines

The Philippines has been divided into 12 administrative regions in order to overcome problems with planning and administration of urban infrastructure at the local level. Capacity building in local planning institutions has taken on a central role, with special emphasis on financial, institutional and physical integration of different sectoral projects. In the 1990s, USAID initiated the Local Government Infrastructure Fund (LGIF) to try out innovative approaches to planning, implementation and management of service provision. The fund grants seed money to local government units for the provision of basic municipal infrastructure. The units match the seed money with resources from the private sector, including technical and physical resources. Users of the services, in the form of co-operatives, are involved in the management of projects.

Eligible projects include markets, bus stations, roads and bridges. Many of the local government units have been surprised by the willingness of the private sector to participate in the project.

Maintenance of facilities once completed is a key concern. Experience has shown that, due to the limited budget, skills, authority to make decisions, and management capacity within the local government units, the private sector is better equipped to maintain projects.

Source: Singh (1996) p. 103–118

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