

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.

THIS KEY SHEET discusses how land tenure regimes can affect the delivery of pro-poor infrastructure services, and how the provision of infrastructure services can affect land rights.

Land tenure refers to the conditions and institutional arrangements under which land is held, used and transferred (see Box 1). As an outcome of historical and social forces, it varies between societies. Land restitution and redistribution, in which underlying economic and social factors are complicated by political objectives, are not covered here.

Current issues¹

Secure access to housing and land is a basic human right. However a majority of people in the developing world live on or use land over which they have insecure tenure. Tenure security protects people's investments in the land and property they occupy against political or commercial exploitation. Rights to land can be an important source of asset-based security for the poor. There is also good evidence that relative *equality* in land and other assets encourages faster, more equitable economic growth.² For these reasons, secure access to land and housing is a central component of poverty-reduction strategies.

From an infrastructure perspective, unsatisfactory tenure relations can be a serious impediment to investment in roads, housing and other services, and to poor people gaining equitable access to them. This has significant financial and social costs: exploitation and abuse by landlords, especially of female-headed households; crime in no-go areas; and disease. On the other hand, provision of infrastructure can lead to dispossession of those with weak rights.

The past focus on granting individual title based on European-style freehold tenure involved expensive and cumbersome land registration procedures and often failed to keep pace with demand, particularly in urban areas. In some cities more than half the population live in unauthorized housing, and the number is increasing faster than other forms of development. Granting title to one individual in a family unit can exacerbate gender inequality by depriving women of land rights, and can lead to sub-division of common assets like forests and pasture which are important for poor people's livelihoods. There is, however, little evidence of a causal relationship between the holding of freehold/leasehold title deeds in particular, and growth and poverty alleviation.³ What concerns residents most are the income-generating opportunities and access to services and infrastructure at a particular location; poor people often opt for more precarious rights at a favourable location over individual title at a less desirable location.

Box 1 Land tenure terminology

Land ownership can refer to ownership of land itself or ownership of rights or interests in land. In most countries, ownership of land is vested symbolically in the state or head of state on behalf of all citizens, and the more important level of ownership concerns land interests. Leasehold or freehold rights represent interests in the land, not ownership of the land.

Ownership of land or rights/interests in land can be administered under diverse tenure systems, which broadly fall into two groups. Those with European origins are introduced and regulated through state laws (statutory tenure). Those with local origins are often regulated at local levels and in accordance with traditional practices (customary tenure).

Insecurity of tenure is now widespread in both systems in many developing countries. Statutory regimes are often poorly operated. Because customary regimes usually lack documentation and are often only weakly supported in state law, they may provide insufficient security of tenure to existing right-holders in the face of competing interests. The key need today is for land interests to be acknowledged clearly through one means or another, and supported in ways which courts are bound to uphold.

Debate and action over the last 5 years has focused on:

- Identifying appropriate forms of tenure for reducing poverty, including increasing access to infrastructure and services in poor rural and urban areas. What reforms can make a difference to the tenure security of women, slum dwellers, AIDS orphans and other poor groups?
- How to deliver tenure-related services (adjudication, registration, dispute resolution) that are more implementable, efficiently and cheaply sustained, and accessible and accountable to the majority. This includes strengthening the land administration capacity of public sector and local structures, and involving the private sector and civil society.
- Clarifying land rights in situations where there are conflicting laws, jurisdictions and views. This involves dealing with the reality that millions of people still hold land through customary or other informal regimes which have weak or no support in law, and addressing common property issues.
- How to liberalise land markets without increasing landlessness. This is particularly important in overcrowded urban areas where land prices on the open market are extremely high.

The UNCHS Campaign for Secure Tenure promotes tenure reform from a human rights perspective, and statements about the need for tenure reform are often made by governments and donors. However the capacity to deliver reform is often lacking, and it presents problems due to its political nature.

Land tenure and infrastructure provision

In places occupied by poor people with weak land rights, pro-poor infrastructure provision is inhibited in a variety of ways:

- Poor people often end up occupying flood-prone or unstable land, in which provision of infrastructure services is complex and expensive, if feasible at all.
- Poor people's specific needs may be overlooked in favour of overall national priorities. For example, there may be disruption or partitioning of low-income neighbourhoods due to road construction, without compensation.
- More powerful economic and social groups may push out poor people to take advantage of government investments in infrastructure designed for wider public benefit. For example, the poor may be forced out of housing in informal urban settlements, or from agricultural land around watering points in rural areas.
- Self-provision of infrastructure may be inhibited because occupants do not have secure rights to improvements made. This can make a significant difference to livelihood outcomes – for example, limiting self-help provision of sanitation in urban areas, or farm families' investments in soil and water conservation in rural areas.
- The private sector is unlikely to get involved in infrastructure provision, e.g., urban piped-water supply, because its investment is not secure. The opportunities are reduced for planning gain (construction of social infrastructure as a condition of planning permission) that might benefit poorer groups and reduce the need for public-sector infrastructure investment.

Tenure regimes that are not appropriate to the local context can be as problematic for pro-poor infrastructure provision as situations of weak land rights:

- **Individual titling** can permit land-grabbing by elites, or distress sales by poorer families. **Intermediate tenure** can be a better option. For example, the Community Land Trusts for urban areas in Kenya place all land in one settlement under one head title, so open spaces and social facilities are protected from grabbing, but members are encouraged to invest in land development, and market transactions in improvements such as buildings are possible. The 1997 Land Law in Mozambique is another example, in which community rights to land are legally recognised (see Box 2).
- Over-restrictive **planning and building regulations** (for example, based on international technical standards) can oblige poor households or small firms to locate in unregulated peripheral urban areas. Increasing transport infrastructure and services to and from these locations tackles only the symptom.
- Over-restrictive **land-use zoning regulations** (for example, blanket bans on informal market-garden cultivation in urban areas) are rarely desirable and can restrict poorer groups' ability to meet livelihood needs (although the use of some land, for example near sensitive water courses, may need to be restricted). Conversely, permitting mixed housing/commercial use can encourage cottage industry, but requires appropriate electricity, water, and sanitation services.

Box 2 Land law and development in Mozambique

Like other newly liberalizing countries, Mozambique has experienced a rush for land by non-local speculators who may have little investment capital and use only a fraction of the area claimed. Meanwhile local people have lived under great uncertainty regarding their occupancy and use rights; and other forms of development, which could bring badly needed investment, jobs, feeder roads and markets, are blocked. The 1997 Land Law has gone a long way towards resolving this problem by incorporating these basic principles:

- recognizing user rights to far more extensive areas than are currently under cultivation (rights that reflect the reality of the integrated and complex rural land use and farming systems);
- ending any distinction between land rights acquired through customary occupation and those formally allocated by the state;
- creating a new legal concept of 'local community', to which land rights can be attributed;
- giving local communities the right and obligation to participate in the management of land and other natural resources.

This law is backed up by appropriate regulations developed by a Land Commission Technical Secretariat, which serves as a multi-sectoral and cross-interest forum for resolving land issues. It is also supported by a Land Policy which foresees an interactive partnership between local people and investors to bring benefits to both sides.

Source: Tanner (2000)

There are a number of ways that tenure regimes can facilitate pro-poor infrastructure provision:

- Infrastructure delivery is considerably cheaper in **planned settlements** – in Colombia, it has been estimated as 2.7 times cheaper than in 'pirate' developments where there have been illegal, non-planned sub-divisions.
- Integrated provision of core road, transport, water and other services to existing squatter settlements can be achieved through **regularisation programmes**. In Brazil, special residential zones for social housing (ZEIS) are created that correspond to existing informal settlements. However, these schemes are very demanding of the time and energy of officials. Prior risk assessment is needed in marginal areas, which may be unstable, subject to flooding and pollution, etc.
- Tenure security to encourage self-help infrastructure improvements can be achieved in a variety of ways. In Benin, **customary tenure practices** have been integrated into statutory law and planning regulations through the use of 'housing permits' for 'presumed owners', although the costs of up to US\$ 800 per household is out of reach of the poorest. **Spousal co-ownership** is proposed under the Land Act implementation support programme in Uganda to protect women's investments in the family farm.
- Strengthening local community groups in preparation for **locally organised formalisation of tenure** or for **group-based tenure developments** (e.g., for common property resources such as grass and timber for building, grazing, fuelwood, fruits and edible plants, water resources) can have a useful secondary effect of mobilizing demand and self-reliant action for infrastructure and services.
- Strengthening poor peoples' rights over land and common property resources can create a new livelihood context, which in turn stimulates fresh approaches to the design, location and access regimes for infrastructure investments. For example, increasing incomes through market gardening may become an option in peri-urban areas, but this depends on having local access to reliable affordable transport and water services. In Lola, Chile,

after support for urban agriculture was provided in this way, family incomes increased by 30 per cent.

- Infrastructure needs for disaster prevention and disaster alleviation can be assessed better in situations of secure land tenure and associated access to land information.

Because most people in developing countries have weak rights to the land they use and occupy, providing infrastructure intended to benefit poor people may not do so. Ideally, by focussing on poor people's specific infrastructure needs and livelihood context, pro-poor infrastructure provision acts as a catalyst for strengthening their rights to secure housing and productive land, and reviewing zoning, planning and building regulations. If this does not happen, there is a real risk that infrastructure provision will result in dispossession of poor people from their homes, land and communal resources, as more powerful economic and social groups seek to capitalise on the resulting opportunities.

Key issues in decision-making

A starting point for providing infrastructure services that serve poor people effectively is to **discuss people's specific needs at first hand**. Under tenure regimes where poor people's rights to use and occupy land are weak, this information may not be readily available, and national development objectives may have prevailed in Poverty Reduction Strategy preparation and other national planning processes.

Box 3 Involving stakeholders in identifying infrastructure needs

In Sri Lanka, a Pilot Scheme for Low-Income Settlement Upgrading strengthened the positions and roles of elected Community Development Councils with the help of an independent volunteer agency, resulting in pilot sites developing their own water supply, drainage and sewerage.

- Involve users at all stages of planning and implementation, for example through community groups. New planning and management techniques, such as action planning, can be effective and also build capacity for future participation. Groups may need help to source the information they need and to negotiate effectively with public authorities and land owners (see Box 3).
- Involve partner planning, housing, infrastructure and land-management agencies with detailed knowledge of local tenure administration and the land market, combined with a mandate to protect the interests of the poor. Much depends on the local context (see Box 4). This should be increasingly easy at the local government level, where integrated planning and delivery of services is a cornerstone of most decentralization programmes, particularly so where decentralisation has extended to bringing communities into local government (e.g., in Ethiopia, Tanzania and Uganda) or

where reform programmes are devolving control over tenure to local levels (e.g., in Eritrea, Tanzania and Uganda).

- Make infrastructure standards relevant to the effective demands and incomes of the poor, and let households make their own trade-off between cost and quality of services. For example, building standards that can be eliminated without jeopardizing safety, should be. Construction and service-delivery standards can be agreed with relevant development and housing authorities, e.g., as part of national slum development policy.
- Inner-city revitalization and regularization projects should not unintentionally victimise small enterprises and street vendors, e.g., by bringing them into the embrace of over-restrictive building regulations and license fees. Temporary Occupation Licenses in Kenya are one approach that encourages small entrepreneurs: allocation is quick and cheap but secure; planning regulations are flexible and allow the use of temporary construction materials; and trunk services and electricity can be tapped. In return, the Council gets efficient utilisation of idle public land without giving up title, and enhanced municipal revenues.

Many poor people in developing countries live in **informal settlements in difficult terrain**. Therefore, infrastructure planners should not limit themselves to addressing the needs of settlements that are recognised in official land-use and zoning documents, or those that can be reached using engineering solutions designed for more conventional terrain:

- Services for three categories of informal settlement need to be distinguished: buildings outside normally approved areas; buildings with different servicing standards (e.g., traditional buildings); and buildings in areas with different tenure (e.g., multi-layered, where rights to the land, ownership of buildings and occupancy of buildings may be held by different people).
- Part of the solution may lie in land-use agencies regularising occupancy (or relaxing restrictions on moving to better areas).
- The informal sector may have an important role to play. For example, door-to-door water sellers may provide an effective service in terrain where piped water supply is not feasible.

Indeed, pro-poor infrastructure services provision **need not always fall to public sector** authorities:

- Private-sector investment in infrastructure can be encouraged by providing more secure rights. These can include developers' security of tenure and rights to any improvements made; and occupancy rights and records to users, which can make collection of charges easier.

Box 4 Infrastructure needs depend on local context

The impact of rural road intensification depends on the agronomic potential of the surrounding areas, distance to markets, and the tenure security of existing land users. In low-potential areas, far from markets, poor people with weak land rights can find themselves ousted from the land they previously used (or prevented from accessing wild resources or non-timber forest products) with little compensating employment generation. But road intensification in non-critical forest areas near markets where poor people have secure land rights can contribute significantly to development opportunities.

Box 5

Options for financing self-provision of infrastructure by poor people

- Those renting or leasing from public authorities could be allowed to use these contracts as collateral.
- In Malawi, a discount facility serves housing finance institutions which lend to poor people, and a mortgage bank facilitates access to housing by low- and middle-income families.
- In Colombia, group intermediation is allowed for self-construction projects, which allows people access to subsidies even if individually they cannot provide the guarantees required.
- In Bolivia, under the *anticretico* tenure system, occupants pay house-owners a lump sum in hard currency for the right to occupy the property for a given period of time, enabling the owner to finance improvements and service charges whilst protecting the occupant against the unknown impact of future inflation.

- Small-scale entrepreneurs may be the most appropriate providers in slum areas. They should be encouraged, subject to minimum service standards, e.g., by relaxing non-essential regulations or providing micro-credit.
- Giving tenure security and access to financial services to poor people can encourage them to invest in their own housing and basic services (see Box 5).
- Community participation and labour-intensive infrastructure projects can be financially realistic means of providing basic infrastructure in urban slum areas, especially where services standards have been simplified. The World Bank *PRSP Source Book* points to the need to develop principles of service provision, including standards and rates, for these situations.

Tenure regimes must permit appropriate **cost-recovery** and **maintenance** of infrastructure services after initial construction:

- Expect users to pay (for acceptable services) for land title, electricity connections and housing improvements, as these are private goods and services. Targeted subsidies based on income may be required for individual households in the lowest income groups.
- The cost of public or communal services such as storm drainage and roads can be recovered through property taxes or similar in situations of regularized tenure.
- Agree with relevant authorities how (and through what structures and processes) the access to infrastructure will be managed and defended, and how disputes are to be resolved, after the initial construction period. This can protect against, for example, dangerous irregular networking from neighbours with authorized connections to piped water and electricity.
- In right-to-buy programmes for government housing stock or private leasehold property, the responsibilities for managing communal areas and maintaining the fabric must be clearly specified. Who is to control service charges and management policy?
- Local authorities need dedicated resources and training for the collection of service charges. New information and communication technologies can greatly simplify systems (see Box 6).

The *provision* of pro-poor infrastructure services does not guarantee that poor people can *access* them. **Access rights must be defined** using an appropriate legal form (not necessarily title deeds) by the relevant authorities, **and defended**.

- Public housing programmes and mass transit developments should be undertaken jointly with a development authority with specific responsibility for the welfare of the poor, so that the benefits of these improvements do not pass on to others if the poor do not themselves own the land being developed. This has been done systematically in Singapore and more sporadically in a number of other cities, including Fortaleza in Brazil.
- Recording access rights using information and communication technologies can help to protect poor and vulnerable groups from exploitation (see Box 6).
- The relevance and accessibility of particular infrastructure services to the target group must be kept under regular review: It may be necessary to make changes in response to changes in land-use zoning and tenure regimes over time.

Websites and expertise

- DFID Land Tenure Advisory Committee j-quan@dfid.gov.uk
- Geoff Payne Associates: gkpayne@gpa.org.uk
- FAO Land Tenure Service www.fao.org/waicent/faoinfo/sustdev/ltdirect
- Land Tenure Center, Univ. of Wisconsin-Madison: www.wisc.edu/lc/
- Ordnance Survey: www.ordsvy.gov.uk
- Oxfam UK: www.oxfam.org.uk/landrights/
- UNCHS Campaign on Secure Tenure: www.unchs.org
- World Bank Land Policy Network: www.worldbank.org/landpolicy
- World Bank PRSP Source Book: www.worldbank.org/poverty/strategies/chapters/

Box 6

The role of information and communication technologies in strengthening tenure rights in India

The 387 land and property registration offices in Andhra Pradesh, which process some 1.2 million documents a year, now operate computerised counters to help citizens complete registration requirements within an hour instead of several days, increase transparency in property valuation (removing corrupt middlemen and brokers), and make archiving more effective. In Karnataka, the Department of Revenue has computerised the 20 million records of land ownership, enabling the state's 6.7 million farmers to obtain printed copies immediately for a small fee at any of the 140 *taluk* offices. In Vijaywada, Andhra Pradesh, 5 local kiosks linked to municipal offices in the city through a wide area network, deliver building approvals and collect property, water and sewerage taxes, reducing corruption, making access to services more convenient, and improving municipal finances.

Source: www.worldbank.org/publicsector/egov/

References and key literature

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- Payne, G. (2002) *Land rights and innovation: Improving tenure security for the urban poor*. London: Intermediate Technology Publications. (Presents alternatives to individual title, accompanied by a media pack containing examples of innovative approaches to urban tenure in 15 countries).
- Tanner, C. (2000) Customary Land Identification and Recording in Mozambique. Paper presented at 'Securing Customary Land Tenure in Africa': Workshop on the local recording and registration of land rights.
- Toulmin, C. & J. Quan (eds) (2000) *Evolving land rights, policy and tenure in Africa*, London: Department for International Development, International Institute for Environment and Development, and Natural Resources Institute.

Endnotes

¹ For more on land tenure issues and options, see the *Key Sheet for Sustainable Livelihoods* on land tenure (ODI, 1999).

² See for example Deininger and Squire, 1998; Toulmin and Quan (2000).

³ For contrasting views on this see, for example, de Soto (2000) and Payne (2002).

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These Key Sheets have been produced by the Overseas Development Institute on behalf of DFID.
They are available on the Internet at: www.odi.org/keysheets/

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