

## PRO-POOR REGULATION

### Challenges and Implications for Regulatory Design

*Principles and institutions for economic regulation of infrastructure services were originally translated from industrial countries to developing countries. However, there is a growing recognition that regulatory bodies in the latter must rise to specific challenges, as they need to deal with the interests of poor consumers, who may represent a large portion of the population. This has implications for the approach to regulation and raises questions as to what the most pro-poor institutional set-up may be. In particular, when subsidies are allocated on an output-based system, a key issue relates to the linkages between the institution in charge of allocating subsidies and that in charge of regulating private providers. This note explores the challenges of pro-poor regulation and points to ways in which they have been addressed in developing countries.*

### What are the challenges of pro-poor regulation?

Infrastructure regulatory bodies are rarely set up with the specific remit of protecting poor customers and they often lack incentives to do so. Whereas the business of regulation can prove challenging, especially for incipient regulatory bodies, regulating services to poor consumers can be difficult and cumbersome. It calls for a thorough understanding of those customers (see Box 1) and specific skills in order to be able to gather and analyse information (such as surveying techniques, community liaison or institution building), as well as dedicated human and financial resources.

#### Box 1 – Understanding the needs of poor customers

- *Who are they?* One fundamental difficulty is to obtain information on the potential customer base, due to the absence of property rights and formal addressing systems, and the dearth of statistical information about poor communities, which tend to be quickly evolving.
- *How do they currently obtain services?* The poor often obtain services via a mix of options, including resellers of utility services or shared outlets (such as water stand pipes or public phone booths). These providers are often small and informal (although some have become “institutionalised”) which may imply issues of poor quality or unfair competition.
- *What can they afford?* Even though the poor’s willingness-to-pay for services might be higher than often expected, affordability is a key issue, and subsidies may be required for equitable service provision. Such subsidies need to be well targeted to be efficient.
- *How are they organised?* Rural communities may be more cohesive and lend themselves more easily to community organisation, in which case the regulator can deal with community leaders directly. By contrast, peri-urban areas may be more disjointed, without an organised voice to express their needs.
- *What do they want?* The needs of the poor in urban, peri-urban and rural areas may be very different and would vary from one community to the next. The poor are often acutely aware of the price/quality trade-offs but they might have difficulties in conveying their preferences to a regulatory body, especially if they are illiterate, so community liaison may be required.

Pro-poor regulation, broadly defined as protecting poor customers, irrespective of where they are or who serves them, therefore calls for several departures from the way regulation is traditionally conducted.



## **What does that imply for the conduct of regulation?**

Pro-poor regulation must be flexible in order to adapt to the different and changing circumstances that poor customers live in. Adopting a people-centred and transparent approach can also help in getting buy-in for the regulatory process from poor customers and reaching the right outcome: the tariff/quality mixes that poor customers want and makes private sector participation sustainable.

### *Competition regulation*

In many cases, the market can achieve superior outcomes than those from regulation. The potential for introducing competition should therefore be explored in the first instance, with a view to establishing a level-playing field for the main utility and alternative providers. This does not necessarily mean applying the same rules to all. A lighter handed form of control (including heavy reliance on reputation through the publication of league-tables, for example) and clearly defined entry and exit criteria may be required for alternative providers. Licenses for new (and smaller) entrants may be much simpler than for incumbents to limit barriers to entry. For example, new entrants may be required simply to register or receive a permit in order to provide a basis for controlling essential safety, environmental or public health concerns.

### *Price regulation*

In most cases, however, competition alone would fail to extend services to the poor and subsidies are required to bridge the gap between tariffs and cost-recovery levels, at least during a transitional period. Pro-poor tariff design is therefore inextricably linked to subsidy design. How tariffs (and subsidies) are set can have a very decisive impact on the ability of service providers to reach the poor (see **Box 2**). Given the issues with subsidy design, there is increasing pressure to develop innovative ways of delivering subsidies. For example, the output-based approach, whereby subsidies are related to the service provider's performance, is attempting to change the way subsidies are delivered by involving more up-front commercial financing (since the bulk of the subsidy is paid on delivery of the 'service' leaving the private operator to finance the initial investment) than in a traditional co-financing approach.

### *Quality regulation*

Quality regulation may also be used to lower costs and to make service extension more affordable for the poor, thereby reducing the need for subsidies. <sup>(1)</sup> Pro-poor quality regulation needs to be flexible, allowing for service level differentiation between categories of providers and for evolving standards. Consultation mechanisms may be required to relay customers' needs, either through committees organised by the regulator (such as consumer networks attached to the Electricity Regulator as proposed in Karnataka) or through an alternative, and potentially more

(1) See Bill Baker and Sophie Trémolet, Viewpoints 219 to 221  
<http://www.worldbank.org/html/fpd/notes/access.htm>.

engaging form of customer participation, which consists of establishing partnerships between the public, private and civil society sectors in order to derive the most appropriate quality levels and quality regulation instruments. <sup>(1)</sup>

**Box 2 – Methods for subsidy delivery**

**Direct subsidies** – This is the “first-best” for allocating subsidies to poor customers, as they tend to be better targeted. Both Colombia and Chile have developed such systems for a variety of “social” services on the basis of a single scoring mechanism to identify poor families that are entitled to those subsidies. But those systems are difficult to put in place and require institutional capacity.

**Cross-subsidies** – they are generally used when allocating direct subsidies is deemed too difficult and can take various forms.

- **By type of use or volume** - One common way to cross-subsidise is to introduce differentiated tariffs according to the type of use (typically, industrial users cross-subsidise household users) or the quantity consumed (with “dissuasive” tariffs for higher levels of consumption). Based on extensive research and case analysis, it has been established that: (i) such increasing-block tariffs reduce the availability of funds for long-term investments in network extension, and (ii) they can be regressive, as they may drive prices up for large families or those using a shared connection. Errors of inclusion (whereby rich families obtain the subsidy) and of exclusion (whereby poor families do not get it) are common and blur the pro-poor characteristics of such tariffs.
- **By region** - Another common method is regional cross-subsidisation, whereby customers within the same category all pay the same price throughout the country, irrespective of the costs they impose on the utility. Such mechanisms have proved relatively effective for extending services beyond the capital city into secondary towns and rural areas, such as for water services in Cote d’Ivoire or Senegal or water and electricity in Gabon. However, they were not sufficient to finance universal access across those countries’ territories. <sup>(2)</sup>

**What does that imply for regulatory design?**

The challenges of pro-poor regulation should be taken into account when designing regulatory and institutional frameworks. Key issues for regulatory design are discussed below.

*Vertical location: at which level of government should regulation be performed?*

The regulator’s responsiveness to the needs of the poor will depend on the level of government at which regulation is performed, i.e. whether it is at the Federal, regional or municipal level. In general, the closer to the level of service provision, the more responsive the regulatory body will be to the needs of poor customers, which may differ widely depending on whether they are in rural or urban areas. However, this might raise issues of capacity and resources (both financial and human), which are typically less abundant at lower levels of government. Further,

(1) See Sophie Trémolet and Sara Browning, “The Interface between Regulatory Frameworks and Partnerships”, on <http://www.bpd-waterandsanitation.org/english/docs/regulation1.pdf>

(2) See Sophie Trémolet, Viewpoints (check with Suzanne Smith for publication date and references) “Rural Water Service: Is a Private National Operator a Viable Business Model?” and “Multi-Utilities and Access: Can Private Multi-Utilities Help Expand Services to Rural Areas?”

this introduces greater risk of political capture. Several solutions can be used to address this:

*“Peppering” regulatory functions.* Different regulatory functions may be allocated to different levels of government, based on a careful analysis of which regulatory functions can best be performed at which level. For example, the concession contract for water services in Buenos Aires is regulated by a tripartite regulatory entity, ETOSS, comprising of representatives from the Federal, provincial and municipal governments. Recently, however, ETOSS decided to allocate responsibilities for defining the precise timing of coverage obligations to municipalities (as they were only broadly defined in the contract).

*Establishing a “sunshine regulator”.* When regulatory functions are performed at a local level, there might be a need for support and oversight at a more central level (this is typically the case for decentralised water services, which are often regulated by municipalities). In that event, a national “sunshine regulator” can increase transparency by publishing comparative prices and performance tables, and can intervene as an arbiter in case of problems. This system is in place in Colombia for water services, where the CRA (*Comisión de Regulación de Agua*) establishes overall principles for tariff setting, which are then applied by municipalities.

*Horizontal location: does multi-sectoral regulation benefit the poor?*

Multi-sectoral regulation is usually advocated to reduce costs and to introduce better coordination in the way regulation is carried out. It is most effective at reducing costs if the regulatory structure mirrors industry structure, i.e. if multi-service provision is also in place. However, this remains relatively rare except where multi-service providers developed historically, such as in West African countries. For example, a single Ministerial body regulates the national water and electricity utility in Gabon (SEEG), with corresponding reductions in the costs of regulation: this entity only needs to conduct one coverage study for both services, which is considerably cheaper given the high level of rural population dispersion. In other instances, multi-sectoral regulation may be limited to simply an oversight system, as in Bolivia, where a general regulator verifies the transparency of the regulatory process undertaken by sector regulators for the various infrastructure industries.

*Taking a flexible approach to the definition of a regulatory system*

A mix of sectoral and multi-sectoral regulators at different levels of government might be the most appropriate option for pro-poor regulation. This approach was developed in South Africa, with national regulators for the main infrastructure sectors (in charge of examining technical issues and setting new standards) and municipal regulators that can be organised on a multi-sectoral basis, as in Johannesburg. In that municipality, the Contract Management Unit (CMU) was set

up to oversee private sector participation in a number of services under various contractual forms, ranging from water, electricity and waste to the zoo or cemeteries. The CMU is responsible for regulating and monitoring the relationship between the municipality and the independent entities and for enforcing performance standards. However, such solution introduces the risk of conflicts between different levels of regulation. For example, the National Electricity Regulator in South Africa and the municipality of Cape Town recently brought a dispute about who had the right to set low-voltage tariffs in front of the national courts.

*Should a dedicated pro-poor regulatory body be set up?*

Given the flexible approach that may need to be taken for pro-poor regulation, one key issue is whether or not a dedicated pro-poor regulatory agency should be set up. Although there is not much evidence to answer either way, it appears that setting up a dedicated regulatory agency would risk harming the long-term interests of the poor rather than serving them: it could maintain an artificial separation between the main provider and alternative service providers and would risk confining poor customers to an “exception” regime. However, recognising the specific nature of poor customers’ needs requires exploring a number of institutional solutions, as detailed below.

*Creating a dedicated low-income customer unit within the regulatory body.* Giving a general pro-poor remit to a regulatory body is unlikely to be sufficient to implement the flexible approach to regulation called-for above. Specific tasks will need to be carried out, requiring specific skills, including social development and community liaison. For example, to target subsidies or adapt quality levels, the regulator may be required to map areas of poverty within the regulated area – this cannot be done once and for all in the contract since the location of poor customers is likely to evolve, possibly rapidly. This solution can be adopted relatively simply, through the hiring of staff used to dealing with poor customers within the regulatory body itself.

*Establishing a parallel institution in charge of delivering subsidies.* A commonly used institutional solution consists of creating parallel agencies to deliver subsidies to the poor, such as the Universal Service Agency for telecommunications services in South Africa or the Rural Electrification Board in Bangladesh. This solution can generate a number of coordination issues between the two parallel agencies, however. These issues are discussed in more details in the section below.

### **Implications for subsidy delivery**

Several issues may emerge as a result of the interaction of institutions in charge of regulation and subsidy delivery, in particular when more sophisticated methods for delivering subsidies are used, such as output-based aid.

*Setting subsidy levels.* As subsidies are often treated as an instrument to gain political support, regulatory bodies can rarely exercise much control over actual levels of subsidies. This may contradict their regulatory objectives, which means that some coordination mechanism may need to be set up. In Andhra Pradesh, for example, the Government is in charge of setting and paying subsidies, but it often fixes them at a level that it is then unable to sustain. By contrast, the regulatory body strives for cost-recovery tariffs. Should the government fail to pay the subsidy level that it had committed to, the law allows the regulatory body to increase the tariff level that it had set on the basis of the original subsidy amounts. But this means that the regulator needs to monitor the subsidy payment directly and to adjust tariffs on this basis, which presupposes close coordination between the two institutions.

*Delivering licenses.* When provided on an output-based aid approach to small-scale providers (as it is being done in rural areas of Paraguay for water services provided by Aguateros), subsidy allocation may call for the simultaneous issuance of licenses to those operators. But in order to regulate competition, regulatory bodies should have a say when licenses are issued. So if the subsidy agency is in charge of inviting bids on the basis of a least-cost subsidy (or a fixed subsidy) method, the role of the regulatory body will need to be carefully thought through, from one of simple verification of the licensing process to a more direct implication. This kind of issue have emerged in the Senegalese electricity sector, for example, where a rural electrification agency set up in parallel with the regulatory body started carving up the national territory in small concessions for rural operators, thereby ignoring the that the incumbent operator also operates in some of these rural areas and may have some exclusivity rights over those areas.

*Monitoring performance.* When subsidies are linked to performance, the institution in charge of delivering subsidies would need to subsequently monitor performance, thereby infringing on the regulator's responsibilities or creating a potential overlap. On reverse, if the regulatory body was in charge of carrying out all performance monitoring and thereby had the right to decide whether a subsidy can be paid or not, this could potentially affect its impartiality in the regulatory process.

For all these tasks, coordination mechanisms between the two types of institutions would therefore be required, even though coordination may still be difficult to achieve in practice. Some would argue that to avoid such difficulties, it might be preferable to have one single agency. This has been done in some countries, such as for the Electricity Control Board created in 2000 in Namibia, which is both in charge of regulating and handling the Rural Electrification Fund.

However, the risks in combining those functions may actually outgrow the difficulties of establishing coordination mechanisms, especially when the regulatory body's independence is difficult to ensure. These risks are highlighted by the experience in Cote d'Ivoire with the provision of subsidies for social water connections to the private operator via the Sector Development Fund, co-managed by the regulator and the operator. There, the regulator (i.e. the Water Ministry) has given undue precedence to the provision of social connections over investments in maintenance and renewal of the existing system, thereby endangering its long-term sustainability. Also, it has proved ineffective at monitoring that customers do not get several free connections, as it was not able to carry out the regular checks that such responsibility entails.

### **Conclusion**

Pro-poor regulation raises many challenges, both for the design and the practice of regulation. In particular, the provision of subsidies on an output-based basis may help targeting subsidies to the poor, but it also generates some complex institutional issues. For this process to be efficient and to minimise distortions, policy makers and subsidy designers should carefully review the institutional set-up and assign clear responsibilities to subsidy delivery agencies and regulatory bodies for setting the level of subsidies, granting licenses and monitoring performance. Keeping those institutions separate appears preferable, unless coordination is difficult to establish.