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03

## Regulation in Infrastructure Development The Role of Consumer Participation

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## Abstract

*India has an ancient history of consumer protection. Kautilya's 'Arthashastra' which was published in 4th century BC, was the basic law of ancient India which postulated the need for consumer awareness and protection. Ideally, market dynamics should ensure that the interests of the consumer and the interest of the provider of goods or services are balanced. However, markets do not always function ideally and are often characterised by one or more elements of failure. Given that, economic interests of powerfully organised producers and inadequately organised consumers often clash at the level of the industry, there is a case for regulators which not only takes into account views and interests of all stakeholders but ensure that consumers have the opportunity as well as capacity to voice their opinions regarding the conduct of regulation and supply of the services.*

*It is in this backdrop, the paper examines and elaborates the importance of consumer participation in infrastructure regulation through information exchange between regulators and consumers; consultation with consumers; and facilitating partnerships. Besides, the paper through examining the electricity reforms in India, outlines the importance of having an independent regulator for each sector and demonstrates that consumer participation is limited not because of the absence of regulatory provisions but of necessary information, human capital and training facilities and programmes.*

### I. Introduction

#### *Rationale Underlying Consumer Oriented Modern Regulation and its Evolution in Developing Countries*

Consumers are the *raison de'être* of all economic activity in all economies. The satisfaction of consumer interests provides the necessary stimulus for economic growth as all production has to be driven by consumer demand – willingness as well as ability to pay. Moreover, the bulk of consumers are ordinary citizens – the suppliers of both skilled and unskilled labour that drives economic activity. The quality of goods and services, especially of essential ones, is a key determinant of the health and productivity of these citizens which in turn determines economic growth. Thus, both from a demand and supply point of view, sustainability of economic growth and thus rise in the standards of living in developing countries is preconditioned on economic activity being tuned to the needs and interests of consumers through suitable regulation.

Given that economic interests of powerfully organised producers and inadequately organised consumers often clash at the level of the industry, there is a case for regulators which not only takes into account views and interests of all stakeholders but ensure that consumers have the opportunity as well as capacity to voice their opinions regarding the conduct of regulation and supply of the services.

Most developing countries including India were traditionally characterised by significant government involvement in their economies marked by dominance of large state-owned enterprises. Economic liberalisation started in many of these countries during the 1980s and 1990s and consisted of adoption of economy wide policies of deregulation, privatisation and liberalisation. These policies were complemented by sector specific steps aimed at eliminating public monopolies or opening up key sectors such as telecommunications and electricity. However, India has decided to follow a mixed economy approach which means that while the sector is deregulated to allow private sector players to come in, the

public sector enterprises will also co-exist, thus aiding competition.

Sector specific steps were marked by the establishment of regulatory bodies in key utility sectors such as telecom, energy and water which provide essential services to citizens. The quality and magnitude of these services are key determinants of consumer welfare. Sector regulators play a very important role in facilitating an environment in which service delivery is accompanied by adequacy in quality and magnitude as well as affordability (Box 1 provides a detailed explanation). Thus, it is important that sector regulators function effectively.

Why do sector regulators have to act as facilitators in the manner mentioned above? Ideally, market dynamics should ensure that the interests of the consumer and the interests of the provider of goods or services are balanced. However, markets do not always function ideally and are often characterised by one or more elements of failure: externalities where action by one agent imposes/generates costs/benefits on/for others not penalised/rewarded by the market; information asymmetries across producer and consumer groups; large economies of scale which imply that curbs on entry by firms might help to optimise efficiency in production; and finally, artificial barriers erected by existing firms to entry and participation by others or to ensure that consumers are not getting competitive prices. The objective behind regulation is to neutralise or prevent market failures so that their adverse effects on economic welfare are avoided. In terms of consumer outcomes, regulation helps to ensure that the beneficial effects of competition on prices, quality and level of output are realised to the best extent possible.

To summarise, regulators play a very important role in mitigating the adverse effects of externalities and asymmetric information on the functioning of markets; simulating competition through contractual arrangements in cases where the existence of natural monopolies implies that competition generated through the free play of market

forces does not generate the best possible welfare outcome; maintaining a level playing field for all potential and existing producers; and facilitating ease of access by consumers to services of utilities and protecting them from unfair and restrictive trade practices

#### Box 1: Why Regulate the Utility Sectors?

- To mitigate the effect of structural causes of market failure: externalities, information asymmetries and natural monopolies
- Dilute artificial barriers to competition created by abuse of dominance by firms and other anti-competitive practices
- Protect consumers from unfair and restrictive trade practices and ensure that service delivery is characterised by adequate magnitudes, reasonable quality and affordable prices

However, regulation<sup>1</sup> being a new area of governance, relevant understanding or capacity within the country is inadequate. The problem gets compounded as views regarding regulatory issues vary across different stakeholder groups, and regulatory problems and needed interventions also differ across sectors. For instance, in certain sectors (e.g. power) there are strong arguments for establishment of monopolies mainly to realise economies of scale. Hence, one would not expect these sectors to get fragmented with privatisation. In fact, unregulated privatisation may result in public monopolies getting replaced by private ones.

From the literature it can be inferred that close to 200 new infrastructure regulators have been created around the world since the late 1990s, largely as part of broader infrastructure reforms (Refer to Table 1 for a status of sector specific regulatory authorities in India). For much of the 20th century, network utilities were vertically and horizontally integrated state monopolies under government control. Recognising the role of infrastructure in generating economic

<sup>1</sup> Here regulation is not in the classical sense of government regulation, but re-regulation, where once a sector is opened up to competition; it would necessitate the establishment of independent arm's length regulators under specific legislation.

growth, alleviating poverty, encouraging investment, etc. many developing/developed countries adopted infrastructure reforms<sup>2</sup>.

Given below are some of the factors that paved the way for the adoption of regulatory reforms in developing countries in the 1990s:

- Performance of state-owned monopolies was extremely poor and characterised by poor quality of service, revenue shortages, inadequate investments, and recurrent problems of debt servicing. In addition, large sections of the population lacked service, and prices varied considerably across population segments, often associated with the highest burden on the poorest consumers. Reform was therefore viewed as a necessity for improving sector performance.
- Political interference: In order to keep their vote banks happy, political parties often pressurised regulatory authorities to adopt inefficient tariffs much below cost and provide poorly targeted subsidies, especially in the power sector, especially in States.
- Governments were fiscally overburdened and adequate resources could not be targeted to bring about needed reform of state electricity boards.

During the 1980s and 1990s, policy makers began to conclude that regulated privately-owned service providers, when subjected to healthy competition, might be more efficient than state-owned operators because of their lower susceptibility to political pressures. Thus, countries began to introduce competition wherever possible and establish utility regulators to enforce concession or licensing agreements and regulate prices (regulation by agency model). Other countries chose not to establish regulatory agencies but rather regulate the newly privatised utilities through contracts (regulation by contract model).

The establishment of regulatory agencies was often the preferred route for protecting the

interests of consumers and ensure a safe and predictable environment for attracting investments. The rationale behind their establishment rested on the need for facilitation of clear and sustainable long-term economic and legal commitments by both governments and investors while giving protection to consumers.

Given the importance and need for regulation and its large impact on consumers, this paper focuses on the role of consumer participation in regulatory reforms. The paper is structured in the following manner: Section II discusses why and how consumer participation plays a decisive role in infrastructure regulation and touches upon the institutional requirements for facilitating consumer participation. It ends with a more specific discussion of principles and mechanisms underlying consumer participation in regulation in India. Section III provides an empirical flavour to the discussion by taking up the case of regulatory reforms in the Indian electricity sector with special emphasis on Rajasthan. The focus of the discussion in this section is consumer participation and it concludes with an elaboration of challenges to such participation and possible solutions. Subsequently, Section IV concludes with a broad discussion of recommendations for encouraging consumer participation in all infrastructure sectors.

## II. Infrastructure Regulation and Consumer Participation

### 2.1 Need for Consumer Participation

Growth of the infrastructure sector should be the common objective of the government as well as the regulator. However, this is often forgotten. A mechanism for regular meetings involving various stakeholders is extremely important in this regard. Such forums enable the process of constructive dialogue among key stakeholders which, in turn, leads to transparency and smooth functioning of regulatory authorities.

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<sup>2</sup> <http://www.regulationbodyofknowledge.org>

**Table 1: Status of Sector Specific Regulatory Authorities in India<sup>3</sup>**

S. No.	Sectors	Status of Regulatory Authorities
1.	<b>Power<sup>4</sup></b>	Electricity Regulatory Commissions (ERCs) exist in almost all states and at the Centre.
2.	<b>Oil &amp; Gas</b>	The Petroleum & Natural Gas Regulatory Board (PNGRB) regulates refining, processing, storage, transportation, distribution and marketing of petroleum products. The Director General of Hydrocarbons under the Ministry regulates other functions such as exploration etc.
3.	<b>Coal</b>	The government owns the operators, the coal companies, and regulates the sector.
4.	<b>Telecom</b>	The Telecom Regulatory Authority of India (TRAI) facilitates competition through regulation and pro-consumer initiatives relating to quality and access.
5.	<b>Ports</b>	The Tariff Authority for Major Ports (TAMP) has limited authority in determining tariffs for major ports. There is no recourse, or performance standards, or consumer protection or competition. Currently there is a proposal to recast the regulator to cover all major and minor ports in India, but the same is being opposed by coastal states because it would reduce their control on ports operating in their regions.
6.	<b>Airports</b>	The Airports Authority of India (AAI) is the operator of most airports; and the Director General of Civil Aviation (DGCA) along with the Bureau of Civil Aviation Security is responsible for safety and technical aspects. A new regulator: Airport Economic Regulatory Authority has been established in 2010 which regulates close to twelve major airports <sup>5</sup> in India.
7.	<b>Roads</b>	There is no regulatory authority as such, while the development body: the National Highways Authority of India (NHAI) has the power to set toll charges.
8.	<b>Railways</b>	The government owned Indian Railways is both operator and regulator.
9.	<b>Water supply and sanitation</b>	There is no independent regulatory authority and the regulation is done by state and local governments. Some states like Maharashtra are in the process of establishing water regulators. The Central Ground Water Board and similar boards at the state level regulate ground water extraction, and other related environmental issues.
10.	<b>Social sector</b>	<p>Primary and secondary education is regulated by states. Higher education is regulated by autonomous bodies such as University Grants Commission (UGC), All India Council For Technical Education (AICTE) and self-regulatory bodies.</p> <p>Independent Regulatory Authority for Higher Education (IRAHE) is under consideration as the existing structure is not the best.</p> <p>In the area of health care, regulation is mainly by States and medical education by self-regulatory bodies such as the Medical Council of India.</p>

<sup>3</sup> "Eleventh Five Year Plan (2007-2012)" Volume I, Inclusive Growth, Planning Commission, Government of India

<sup>4</sup> There is no comprehensive energy sector regulator in India, though it has been suggested on and often.

<sup>5</sup> Major airport means an airport which has, or is designated to have, annual passenger throughput in excess of one and a half million or any other airport as the Central Government may, by notification, specify as such.

In India, the regulatory process has been marked by a significant absence of participation by consumers, probably the most important set of affected stakeholders. Consumers, being largely unorganised, have been largely bypassed by the reform process (except in a few cases where consumer concerns have been highlighted by the media) which has been influenced by a strong business lobby.

Consumer participation in utility sectors such as electricity is highly desirable because of the essential nature of the provided service as well as its crucial role in rapid economic development which in turn has implications for consumer welfare: apart from household use, electricity is a basic input in agricultural, commercial and industrial activities. Therefore, all consumers – domestic, agricultural, industrial and commercial – have a vital stake in the sector. Taking this into account, the Electricity Act 2003 envisages effective consumer participation in the regulatory decision-making process.

Kautilya was one of the earliest in the world to write in his Arthashastra published in 300 B.C. about the need for consumer awareness and protection. In the current Indian economic setting characterised by a large private sector, the need for discipline and regulation of the market has assumed increased importance. Consumers must be aware of conditions underlying the sale, purchase and consumption of goods and services, especially the health and security implications. Legal measures for consumer safety and awareness must be uniform and transparent and consumers must have the tools to combat malpractices and protect their rights.

As electricity is an essential service and used by all sections of society, it also provides wide scope for electorally profitable political intervention in the regulatory decision making process. As a result, decisions related to tariffs and investments have been highly influenced by political interests. But such decisions, though popular in the short run and electorally profitable, are damaging for the long run development of the sector and the

role it can play in the nation's economic development. A study undertaken by CUTS International shows that the regulatory system in India is often influenced easily by narrow political interest as it lacks independence, accountability, transparency and stakeholder participation<sup>6</sup>.

It deserves mention in this regard that myopic promotion of consumer interest at the cost of long run viability of utility sectors is not in the long term consumer interest. Consumers should be made aware of this adverse impact so that they are not easily manipulated by those seeking to use them for their narrow electoral gains. This would result in consumer participation, i.e. in their long run interest as it would promote sustainable development of infrastructure sectors and help regulators maintain their independence and transparency.

## 2.2 Consumer Engagement in the Regulatory Process: Theoretical Framework

As mentioned in Box 2, the three progressively higher rungs of consumer engagement, namely Information, Consultation and Partnership ensure effective consumer participation in the regulatory process. (Box 2 also discusses empowerment as the fourth rung emerging from the mentioned three rungs): clear information empowers stakeholders and thus aids the regulatory decision making process. However, its beneficial use can only be ensured through consultations and their accurate documentation. The result is an effective partnership between consumers and regulators which facilitates the achievement of growth with equity, one of the basic objective of economic reform and liberalisation.

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<sup>6</sup> Mitra S and Singh, V V (2009), "Regulatory management and reform in India", Background paper for OECD, CUTS International

## Box 2: Ladder of Consumer Participation in the Regulatory Process

The literature exploring citizen participation in the government policy making depicts each level of citizen involvement in the political process as a distinct rung in the “ladder of citizen engagement”, with successive rungs of the ladder corresponding to progressively higher degrees of citizen empowerment in determining the outcome of the decision-making process. Similarly, there are different gradations of consumer participation in the regulatory process, varying to a significant extent across countries and sectors and depending on the type of regulatory model in place. The following levels of involvement could be identified as four critical rungs of the ladder of consumer participation in the regulatory process:

- Information

Information is the first step toward legitimate consumer involvement in the regulatory process. At this rung of the ladder, emphasis is placed on one-way flows of communication (from regulators to consumers) with no channel provided for feedback. Hence, when consumer participation is limited to information, consumers have little opportunity to influence the outcome of the decision-making process.

- Consultation

Regulators rely on consultation with consumers and other interest groups as a valuable source of non-binding advice to inform the regulatory process. Consultations can either be conducted on an ad hoc basis on specific consumer issues or throughout the regulatory process. However, if not combined with other modes of consumer involvement, consultations may not be sufficient to ensure effective consumer participation, as it offers no assurance that consumer input will be taken into account in the decision-making process.

- Partnership (acting and deciding together)

The third rung of the ladder, partnership, involves some degree of “redistribution” of decision-making power as consumers are granted the right to negotiate with the regulator and other stakeholders the outcome of the regulatory process. Given the diffuse interests of the consumer constituency, effective partnership with consumers hinges on the appointment of consumer spokespersons fully accountable to the consumer constituency.

- Empowerment (delegating decision-making power to consumers)

At this rung of consumer engagement, consumers are empowered to manage their own infrastructure. Consumer empowerment works best when infrastructure networks are small and can be within the control of a single community – for example, small town water supply systems are often ideal candidates for local community management. However, consumer empowerment is generally unfeasible in the case of large-scale infrastructure, due to the complexity of managing diffuse consumers groups with conflicting interests.

At the first two rungs of the ladder of consumer engagement (information and consultation), consumer participation plays an advisory role. At the topmost rungs of consumer engagement (partnership and empowerment), consumer participation leads to some degree of sharing of the decision-making power. However, given that the topmost rung of the ladder (empowerment) is seldom feasible in large infrastructure industries, this study adopts a three-rung ladder (information, consultation, partnership) to illustrate the different levels of consumer participation in infrastructure regulation.

Depicting different forms of consumer participation as ladder rungs is a useful tool to capture different gradations in consumer participation in the regulatory process. However, the tool presents limitations. First, the ladder is a simplification, as the distinction between different levels is often blurred. For example, even when consumer advice is not binding, consumers’ opposition to regulatory reforms may be strong enough to delegitimise the role of the regulator. Second, higher rungs of consumer participation may not necessarily lead to better regulatory outcomes, in particular in newly-established regulatory frameworks without a tradition of consumer representation. In fact, ascending the ladder of consumer participation is a lengthy and difficult process, which needs to be supported by an enabling institutional environment – the higher the rung of consumer participation, the more sophisticated the institutional environment, needs to be to accommodate additional layers of consultations.

Source: <http://www.eapirf.org/Menultems/Resources/Papers/General/rsr502.pdf>



## 2.3 Institutional Requirements for Effective Consumer Participation

### 2.3.1 Independent Regulator

The responsibility for protecting consumer interests must be assigned to an independent regulatory agency. Independence is a multifaceted concept. It usually centres on distancing the design and execution of the regulatory function from the political and administrative pressures of the government (Refer to Box 3). Thus, independence connotes an arm's-length relationship between the regulator and the 'regulated' with the latter including producers, consumers and other parties affected by regulation; as well as the organisational autonomy required to attract expertise for performing regulatory functions effectively. These relationships are naturally related to the institutional setting within which regulation is delivered. For example, transparency of rules is an important determinant of independence in the exercise of regulatory functions and their effect.

#### Box 3: Regulatory Independence: A Nuanced Concept

Independence is a relative rather than an absolute concept. Progress must be measured against the counterfactual scenarios where ministers would retain direct control over regulatory decision-making. In addition, the level of independence of a regulatory agency depends on the types of safeguards in place to promote its autonomy. There is consensus that the following formal safeguards are key to achieving regulatory independence:

- Providing the regulator with a distinct legal mandate, free of government control;
- Prescribing professional criteria for appointments;
- Involving both executive and legislative branches in the appointment process;
- Appointing regulators for fixed terms and protecting them from arbitrary removal;
- Staggering terms so that they do not coincide with the election cycle;

- Exempting the regulating agency from civil service salary rules that make it difficult to attract and retain well-qualified staff;
- Providing the agency with a reliable source of funding, usually earmarked levies on regulated firms or consumers.

Source: World Bank (2005), 'Consumer Participation in Infrastructure Regulation: Evidence from the East Asia and Pacific Region', by Elisa Muzzini, Working Paper No. 66

Regulatory independence can be classified as follows: independence from government, independence from stakeholders, and organisational and financial autonomy/independence. The first two can be collectively referred to as functional autonomy. Insulating the regulating entity from political interference and active lobbying by service providers is essential for regulatory neutrality and a fair deal for consumers. In other words, only entities operating at arm's length from service operators and the government can act as impartial referees capable of striking a balance among the diverse and often conflicting interests of stakeholders.

Independent regulation scores over regulation by line ministry as the latter is swayed at times by narrow political gains and at other times by the need for promotion of industry or the operation of state-owned enterprises, while the former enhances stability and commitment to optimal long-run policy for viable promotion of consumer interests.

### 2.3.2 Effective Consumer Representation

Effective consumer participation is possible only if consumers have able spokespersons who can articulate their interests and counter the industry perspective, which is usually very strongly represented by service providers. The responsibilities and scope for action by consumer representatives increase as one moves up the ladder of consumer empowerment. Depending on the level of consumer engagement in the regulatory process, consumer representatives may be entrusted with a wide range of powers, encompassing the right to take judicial actions against regulatory decisions, accessing

commercially sensitive information on service providers, representing the entire body of consumers during public hearings, and exercising voting rights in the decision making process of the regulating entity.

#### 2.4 Consumer Participation in Regulation in India: Principles and Mechanisms

The consumer movement in India has undergone a revolution. The movement brought about qualitative and quantitative changes in the lives of consumers. But the path to reach this stage was not easy. The first stage of movement was more representational in nature, i.e., to make consumers aware of their rights through speeches and articles in newspapers and magazines and holding exhibitions. The second stage was direct action based on boycotting of goods, picketing and demonstration<sup>7</sup>.

However, direct action had its own limitations that led to the third stage of professionally managed consumer organisations. From educational activities and handling complaints, it ventured into areas involving lobbying, litigation and laboratory testing. This played a role in hastening the process of passing the Consumer Protection Act, 1986 (COPRA).

India has an ancient history of consumer protection. Consumer protection was part of India's culture and formed the core of its administration. Kautilya's 'Arthashastra' of 400 BC was the basic law of ancient India and the same was strengthened with provisions to protect consumers. India has been a pioneer in consumer protection and a source of inspiration to other countries. COPRA provides not only easy and quick redressal of their grievances but also a mechanism to promote and protect consumer's interest. The Act enshrines the consumer rights and provides for setting up of quasi-judicial authorities for redressal of consumer disputes. This act takes justice in the socio-economic sphere a step closer to the common man.

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<sup>7</sup> CUTS, 2010, Training manual on consumer protection

One critical aspect of COPRA was the ability of consumer organisations to file complaints on behalf of consumers in a consumer forum. This enabling provision has boosted the consumer movement in the country ever since COPRA came into full bloom in late 1980s. Starting with about a handful of consumer organisations before the law was passed, today over 1000 consumer organisations exist in the country. Each of them operates at different levels and budgets.

According to COPRA, consumers have the following rights:

1. Right to safety providing protection against hazardous goods and services
2. Right to be informed about price, quality, purity
3. Right to choose enabling access to a variety of goods and services at competitive prices.
4. Right to be heard to guard consumer interest and welfare
5. Right to seek redress to provide protection against unfair trade practices and enable settling of genuine grievances.
6. Right to consumer education to provide knowledge on issues relevant for full enjoyment of benefits from consumption.

In India, a few sector regulators such as Electricity Regulatory Commission, both Central and some of the States, and TRAI, AERA have created participatory mechanisms by constituting Advisory Committees with representation from consumers and other stakeholders. The telecom sector, among other things, has a Common Charter of Telecom Services, which requires service providers to promote consumer participation in the regulatory process. In electricity, even state level regulators in certain cases have tried to involve consumers in their activities. However, by all accounts participation remains low. The participation of stakeholders, particularly consumers, can be made effective through better designed and implemented public meetings along with wider distribution of reader friendly literature.

After a discussion on the need for consumer participation in regulation, the theoretical framework depicting such consumer engagement, the institutional requirements for effective consumer participation; and the broad elements of consumer participation in regulation in India, the paper embarks on the more specific discussion of regulatory reforms in the electricity sector in India with emphasis on the reforms in Rajasthan. The focus of this discussion is on the level of consumer participation in the regulatory process. This discussion helps to generate insights about the challenges to such consumer participation and how these may be overcome.

### III. Consumer Participation in Indian Electricity Regulation: Focus on Rajasthan

#### 3.1 Regulatory Reforms in the Indian Electricity Sector

Electricity reforms were initiated in the mid-90s as a part of overall economic reforms. One of the key objectives of reforms was to promote a competitive electricity market to ensure affordable and reliable power supply to consumers. During the reform process, radical changes were adopted such as the Electricity Act, 2003 to ensure transparency and accountability in regulation.

Before the reforms were implemented, the electricity industry was under the ownership of the government and controlled by the State Electricity Boards (SEBs). The functioning of most of the SEBs in India was not transparent and key decisions such as tariff fixation, investment allocation and capacity addition were highly influenced by political groups and vested interests. As a result of poor technical and financial performance, and political patronage to people, the SEBs became financially unviable. High transmission and distribution losses (T&D losses), low recovery of dues, poor quality of service, overstaffing etc. were among the common problems resulting from poor operational performance. Thus, in order to rectify the problems, regulatory reforms were implemented in the sector with the motive of improving economic efficiency and ensuring provision of affordable and quality service to the consumer.

Orissa was the first state to implement reforms in the electricity sector in 1996. Apart from unbundling and privatisation of utilities, an electricity regulatory agency – the State Electricity Regulatory Commission (SERC) – was constituted at the state level. A few other states in India such as Andhra Pradesh, Delhi, Gujarat, Haryana and Rajasthan followed the example of Orissa and restructured the power industry at the state level, though stopping short of privatisation. However, only two states, Orissa and Delhi, privatised the distribution business after unbundling SEBs while the others continued with government ownership of the distribution sub-sector through corporatisation, as a step forward in privatisation. Later, to consolidate the reforms and promote a national level electricity market, the Electricity Act 2003 was enacted by the Government of India. The main objective of the Act was to promote a competitive market through facilitation of open access to the transmission and distribution network and effective regulation.

Electricity Regulatory Commissions (ERCs) were constituted both at the Central as well as state level and were assigned important responsibilities such as promotion of competition as well as consumer protection. These bodies were supposed to function independently and take decisions on the basis of balanced consideration of various interests represented by suppliers of services, consumers etc. But, for all practical purposes, these bodies are still not truly independent and face continuous intervention in their day-to-day functioning from the line ministries or other vested interest groups.

Under the provisions of the Electricity Act 2003, SERCs were assigned important regulatory functions. These functions include issue of licences, approval of annual revenue requirement (ARR) and tariffs payable, setting of standards and norms of service, monitoring the quality of service and promotion of competition in the sector. Regulatory decisions on these issues are crucial and directly affect the interests of consumers at large. Hence, the Act envisages provision of opportunities to consumers to participate in the regulatory decision making process.

Regulators are required to take into account the views of consumers before passing orders on various issues such as the aggregate revenue requirement (ARR) and tariff applications filed by the utilities.

Under the regulatory reform process, consumers are supposed to play a pro-active role in protecting their own interests. However, given the absence of adequate support from regulatory bodies and lack of capacity of consumers, public participation has not been effective in many Indian states.

Under electricity reforms about 25 states constituted SERCs to regulate the power sector at the state level. These SERCs are mandated by the Act to invite consumers to participate in the decision making process. The views of consumers need to be taken into consideration in the process of adopting regulatory decisions.

Consumers are supposed to play a pro-active role in protecting their interests in this sector while participating in the regulatory reform process. The observed level of public participation in the hearings organised by the regulatory commissions on various issues including framing of regulations and determination of tariff has been low in most states. Further, the number of written objections is even lower than the number of representations made during hearings. This highlights that the mentioned opportunities provided by the establishment of SERCs to the public for participation in the regulatory process have not evoked much interest. It has also been observed that the hearings are primarily dominated by industry and commercial consumers with domestic and agricultural consumers hardly participating.

The reasons for this low level of participation are manifold, the most important being lack of financial resources, publicity and awareness. While regulatory commissions do advertise the details of hearings in newspapers and on their websites, rural consumers remain untouched. Further, there is lack of consumer education and awareness in this regard. Education is required in a number of spheres, such as consumer rights and obligations under the relevant regulatory

system; means to access information on regulatory decisions; impact of regulatory decisions on different consumer categories; quality standards; and mechanisms available for registering and handling consumer complaints. While most SERCs have framed regulations on the consumer's right-to-know, the consumers are not aware of these. Finally, many of the consumer groups lack access to sustainable sources of funding. Without this they are unable to engage and retain able staff to be able to intervene in the regulatory process.

### 3.2 Consumer Participation in Electricity Regulatory Reforms in Rajasthan

After its constitution, the Rajasthan Electricity Regulatory Commission (RERC) has issued decisions on about 200 important proposals, including ARR, tariff applications, regulations, licensing etc. In each case, the Commission invited consumers to express their views/opinions. Public notices were published laying down salient features of the proposals and mentioning the places from where consumers may get a copy of the relevant documents. The notices specified the process and the time for submitting comments to the Commission.

In spite of the relevant opportunity provided by RERC, consumer participation was not adequate or even absent in many cases. RERC even directed the distribution companies to undertake wide publicity of the public notices. During the tariff-making process for the ARR in 2006-07, copies of the public notice were circulated to consumers with their electricity bills. Only two consumers responded to the Commission on the subject. However, there are exceptions – for example, in response to public notices for the ARR and tariff application for 2004-05, about 105 consumers submitted comments to the Commission<sup>8</sup>.

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<sup>8</sup> Rajasthan Electricity Regulatory Commission, Annual Report 2004-05 Pg 6

### 3.3 Threats to Effective Consumer Participation

Our review reveals the following hurdles limiting the capacity of consumers to participate in the regulatory decision-making process in the Indian electricity sector:

#### 3.3.1 Financial Constraints

As there is a lack of formal and sustainable arrangements for supporting consumer interventions, participation in the regulatory process imposes costs on the interveners. The costly services of legal, economic and administrative experts are required for making effective interventions in the regulatory process. Funds are also required to collect information and make interventions before the regulatory body. Financial constraints, therefore, affect the capacity of consumers to intervene and thus result in poor outcomes.

In the changing regulatory scenario, consumers have to play a vital role in making the system more transparent and accountable. Therefore, a significant but reasonable share of the annual budget of the Commission should be available for enabling and empowering consumers on various regulatory and policy issues in the power sector through training and other educational programmes to be conducted through voluntary consumer organisations. A small cess imposed on the revenue collected by distribution companies is a useful source of funds for this purpose as is the practice in the USA, UK, etc.

#### 3.3.2 Poor Regulatory Response

The role of regulatory bodies is very important for promoting consumer participation in the decision-making process. These bodies may promote CSOs and consumer groups by undertaking wider information dissemination through public notices. Most regulatory bodies have been very formal in this regard. Though they have allowed consumers to participate, efforts to ensure adequate participation and enhance quality of public interventions have been poor and marked by:

- Absence of proactive steps by most regulatory bodies to increase public awareness regarding the new regulatory mechanism: Most of the consumers, especially in rural areas, are unaware of the functioning of regulatory bodies<sup>9</sup>.
- Holding of public hearings only near or at the offices of regulatory bodies making it difficult for agricultural and distantly located poor consumers to participate because of the high cost of travel
- Inadequacy of time allocated to the consumers/CSOs to submit their comments

#### 3.3.3 Information Asymmetry

Another major hurdle is non-availability of reliable information to consumers. Participation in the regulatory process requires information pertaining to the performance, revenue and cost of utilities. In many states, including Rajasthan, a lion's share of power supply to agriculture is un-metered. Therefore, the data on sale of electricity and distribution losses is unreliable and prevents effective participation by consumers from a rural background.

#### 3.3.4 Lack of Training and Capacity Building Activities

The working of the electricity sector is complex and can be understood only by stakeholders with technical knowledge. One such example is regarding the appointment of consumer advocates by Karnataka Electricity Regulatory Commission to represent the consumers on all matters relating to the power sector. However, such knowledge needs to be provided to CSOs/consumers by the government or regulatory bodies through training programmes. Only then will interventions on behalf of consumers become effective<sup>10</sup>.

<sup>9</sup> Sudha Mahalingam and Others (2006), 'Electricity Sector Governance in India: An Analysis of Institutions and Practice', Project Report, sponsored by WRI (Washington DC), NIPFP (New Delhi) and PRAYAS (Pune)

<sup>10</sup> World Bank (2005), 'Consumer Participation in Infrastructure Regulation: Evidence from the East

#### IV. The Way Forward

The paper has elaborated on the importance of consumer participation in infrastructure regulation through information exchange between regulators and consumers; consultations with consumers; and facilitating partnerships. The paper also draws attention to the need for regulatory independence and availability of able spokespersons to represent consumers in facilitating effective consumer participation. It uses the study of electricity regulatory reforms in India to demonstrate that consumer participation is limited not because of the absence of regulatory provisions but of necessary information, human capital and training facilities and programmes.

The discussion in the paper thus leads to certain recommendations for infrastructure regulation in India and other developing countries for ensuring adequate participation of consumers in such regulatory system:

- Constitution of an office of public/consumer advocate within the regulatory body, as has been done by a few states such as Karnataka and Delhi in the case of electricity regulation
- Proactive steps by regulatory bodies to create awareness on regulatory issues among consumers
- Organisation of training programmes to enhance the capacity of consumers/CSOs to represent consumer interests
- Efforts by regulatory bodies to secure funding for consumer training programmes, awareness seminars, workshops, sustenance etc. from appropriate government agencies or through a cess on bills.
- Provision of reliable information to the consumers/CSOs at reasonably low charges/fees

Active consideration of views/comments of consumers while framing the final decisions on tariff and other matters.

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Asia and Pacific Region', by Elisa Muzzini, Working Paper No. 66

## ABOUT CIRC

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