

India subsidises electricity for the rich while millions lack access

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Along with coal mining, electricity is regulated by the state in India and subsidised. Electricity tariffs are kept deliberately low for poor households.

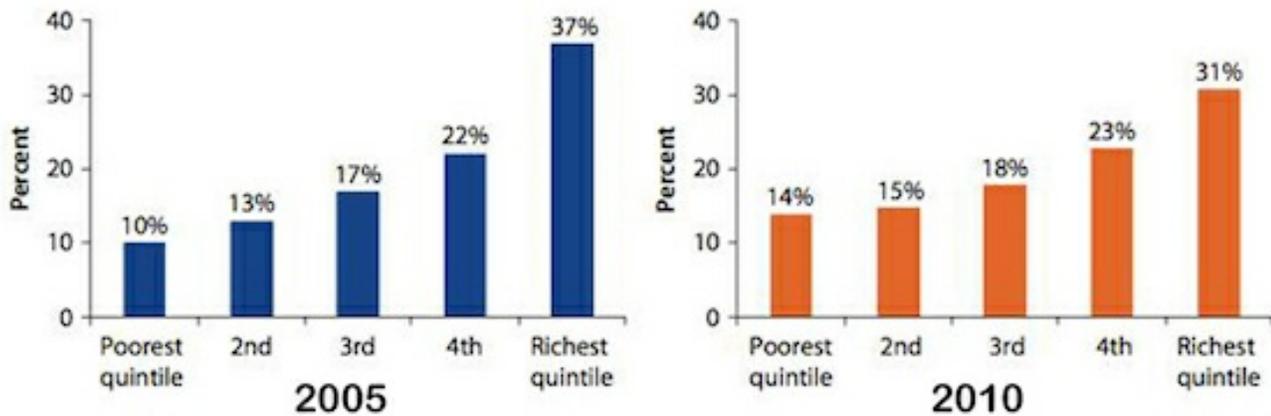
Unfortunately much of this electricity is allocated in such a way that business and industrial consumers as well as the richest users in the domestic sector benefit rather than the poorest.

Rich households benefit, poor households left out

The residential electricity sector accounts for nearly a quarter of India's total electricity consumption. It has been estimated that as much as 87% of electricity subsidy payments go to households "above the poverty line" instead of to the poor. According to the World Bank, the nationally designated poverty threshold as of October 2015 is US\$1.90 per day, measured in terms of purchasing power parity.

Studies made using data provided by the government's National Sample Survey Organisation (NSSO) have shown that over half of subsidy payments are directed to the richest two-fifths of India's households (see chart below).

Trends in subsidy incidence by income quintile in the electricity sector

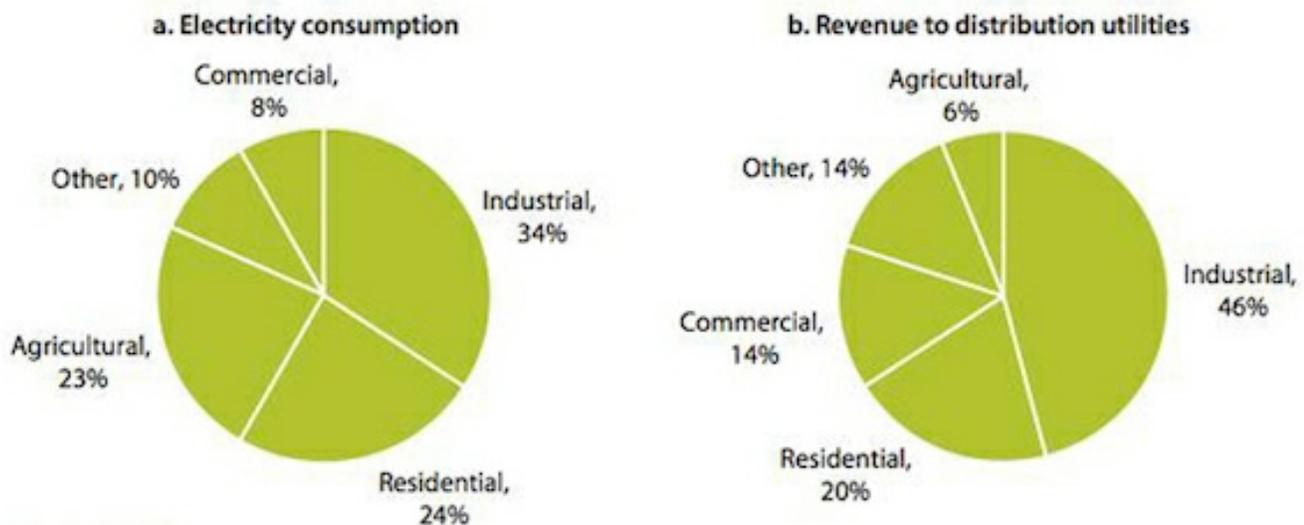


Sources: National Sample Survey 2005, 2010; Power Finance Corporation 2005, 2010; State Electricity Regulatory Commission 2005, 2010

In 2010, for instance, the lowest and second lowest income fifths of the population accounted for just 14% and 15% respectively of electricity subsidy payments. The richest two fifths of the population received 45% of the subsidies. Almost all households in every state get some subsidy on their monthly electricity consumption but the poorest two income quintiles consume significantly less electricity than the rest. This implies that wealthier households with access to electricity are typically eligible for as much, if not more, subsidies as poorer households with electricity.

According to the [World Bank](#), 21.3% of India's population did not have access to electricity in 2011-15. These, the poorest, do not receive any benefit of electricity subsidies at all. India hopes to achieve total electrification in all regions of the country by 2017.

Electricity consumption and revenue to utilities by sector, 2010



Source: PFC 2011.

Connecting the poor

Under the [Rajiv Gandhi Grameen Viduytikaran Yojana](#) (RGGVY), a rural electrification scheme launched in 2005 and named after India's former prime minister, households below the poverty line are supposed to receive free electricity connections. The total estimated cost of the scheme was INR16,000 crore (US\$2.4 billion). The scheme

also laid special emphasis on the sustainability of electricity supply through collection of the cost of electricity from the beneficiaries.

To achieve this, it was proposed that NGOs and consumer associations be deployed as franchisees. The state governments would be free to provide targeted subsidies to poor households while the union government offered implementation and management expertise. Unfortunately, since a significant number of farm connections remain unmetered, quantifying the benefits of the electricity subsidy is a difficult task.

Incentivising bad behaviour

The provision of free electricity led to other undesirable results, such as undue pressure on fossil fuel supplies because of overconsumption. In the last few years, 75-80% of electricity generated in India has been from fossil fuels, mainly coal. Free electricity has contributed to overuse of groundwater, especially in the agriculturally prosperous parts of northern and western India — Punjab, Haryana, western Uttar Pradesh, Gujarat and Maharashtra.

Moreover, the electricity consumption of rural, poor and other low-use households is subsidised in the form of a tariff that is below the cost of recovery, says the [World Bank](#). Given that households in India account for nearly one-fourth of its electricity consumption, net residential electricity subsidies (subsidies plus cross-subsidies) are significant.

Commodity	Share of consumption		Subsidy /Tax rates		Effective subsidy rates(@)	Implicit subsidy to rich (in ₹ crore) (*)
	Rich	Poor	Rich	Poor		
Kerosene	49	51	-38	-38	88	5501
Electricity	84	16	-32	-49	51	37170
LPG	91	9	-36	-36	86	40151
Railways	92	8	-34	-69	53	3671
Petrol	95	5	61	61	—	—
Diesel	98	2	55	55	—	—
ATF	100	0	20	20	30	762
Gold	98	2	1.6	1.6	17.4	4093
Sum of Subsidy						91349
Subsidy on account of PPF						11900
Total subsidy to well-off						103249

Source: NSS, Ministry of Railways, PPAC, World Bank, Delhi Electricity Regulatory Commission

Notes:

- 1 All the figures are in percentage terms, except the last column (which is in ₹ crore).
 - 2 Poor refer to the bottom 30 per cent of the population and rich refer to top 70 per cent population, divided based on expenditure distribution as per NSS data.
 - 3 Negative sign in the column of subsidy/tax rates denotes subsidy rate.
 - 4 Kerosene here refers to the consumption of kerosene under PDS only and not from other sources.
 - 5 There is a blank () in the effective subsidy rate for the category Petrol and Diesel as the tax rate on these categories is already higher than the normative 50 per cent.
- @ Effective subsidy rate (for the rich) is the difference between normative tax rate (50 per cent for energy related commodities and 19 per cent for others) and actual subsidy/tax rate for better-off.
- * Implicit subsidy to rich is the effective subsidy rate multiplied by consumption of that commodity by rich.

In 2010, residential subsidies were INR 22,012 crore (US\$3.3 billion) which was 0.4% of the country's GDP that year. Even in states where residential electricity subsidies are funded by cross-subsidies from sectors such as

industry and commerce, they represent a significant opportunity cost for state governments and their utility companies.

The fact that subsidies do not reach their intended beneficiaries and often lead to perverse and regressive outcomes is borne out when one examines the way in which [coal, oil and gas are subsidised as well](#).

This article was published as part of a three-part series [on Third Pole](#).