

What should be the true price of electricity ?

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Electricity is always priced according to its actual cost of production and transmission and other physical costs. However a better way of pricing it would be after considering how beneficial and useful it is to the consumer.

Electricity provides high quality of life. According to United Nations, Human Development Index (HDI), a measure of quality of life in a country, is directly proportional to its per capita electricity consumption. Thus India has an HDI of 0.6 whereas developed countries like Norway, Sweden, U.S. have HDI greater than 0.9. Consequently, these countries also have very high per capita electricity consumption as compared to India – 6000-12,000 kWhr/year for developed countries vs. 600 kWhr/year for India.

Since electricity provides energy for machines and household gadgets, another way of looking at what it is equivalent to will be useful. Each unit of electricity is equivalent to having nearly three persons working continuously for 7 hours. This is based on calculations that on an average a person can produce 60 W of sustained power over a 7-hour period.

For example an average middle class Indian household uses 400 units/month of electricity or ~ 13 units/day. This translates to theoretically having ~ 40 laborers/day and with an average wage of Rs. 100/day to the laborers, the total cost to household will be Rs. 4,000/day! Whereas the actual payment to electric utilities is only Rs. 65/day (with electricity cost of Rs. 5/unit).

Electricity for rural poor

- (1) Assumption (a big assumption!) is that the rural poor will get 100% reliable electric supply! Even after 65 years of independence 60% of our rural population has nearly non-existent electricity with 16-18 hours of power outage.
- (2) Residence of 2 rooms requiring 1 fan running ~ 12 hours/day, 2 LED lamps for 6-7 hours/day and one plug point. The total consumption ~ 1.5 kWhr/day. With average cost of electricity of ~ Rs. 5/unit the daily expenditure ~ Rs. 7.5/day
- (3) On an average the rural poor earn ~ Rs. 5,000-6,000/month (husband/wife combination). Thus monthly electricity cost will be ~ 4% of their income. {(Rs. 7.5/day X 30 days/month) / Rs. 5,500/month}

This norm of 4% is also valid for a middle class household (Rs. 50,000/- per month income). Nevertheless with better electricity availability in cities they can easily afford higher electricity tariffs.

A slight digression and some perspective!

Perspective:

When the price of vegetables goes up even by Rs. 5/kg there is a hue and cry in cities with all TV networks and media crying hoarse about it. Yet most people do not bat an eyelid when they eat **half a kilogram of food for Rs. 300 - 500 in a restaurant !!!** From the Rs. 5/kg increase in vegetable price the farmer only gets a maximum of Rs. 1/kg – rest is all taken by the middlemen.

Tasty wholesome food and electricity usage define quality of life and hence should be appropriately priced.

For an average middle class Indian, the food and fuel bill (for mobility) each comes to nearly 10-15% of his/her income. Electricity which also provides a high quality of life should be priced such that its bill is of the same order as food and fuel bill. ***With this norm electricity cost will be ~ 4 times the present tariff !!!***

Points to ponder

- (1) Electricity is a very high quality product and should be used prudently and not wasted.
- (2) There should be a different pricing of electricity for rural poor (BPL families).
- (3) With high pricing of electricity.
 - (a) Less wastage by city dwellers will result.
 - (b) Incentive for private players to set up power plants.
 - (c) Lower consumption will lead to sustainable living.
 - (d) More equitable distribution of electricity to rural areas might result.

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