

Electricity crisis in pakistan economics essay



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Intensity of electricity crisis: The Electricity crisis in Pakistan has made it unbearable for people to live in Pakistan. As they have to suffer from sleepless nights due to load shedding. The energy crisis is one of the most troublesome crisis that has been faced by Pakistan. Though it has been a couple of years that the country is suffering from this crisis, but till now no proper steps have been take, neither any proper planning has come into existence by the government or the private sector. This crisis may become more serious or acute as no proper understanding or correct implementations are being taken into consideration.

This energy crisis has not only left people to bear load shedding driven sleepless nights but has also made it difficult to live for the youth of Pakistan. It has resulted in low productivity of the youth as due to shortage of electricity it is very difficult for the students to concentrate on their health, education and other important factors of life. The area of education is being affected vastly by this electricity crisis as due to this electricity shortage there is no possible way to access personal computers (PC), internet, WLAN and other electronic devices. Moreover, at night it is impossible for the student to study without electricity.

Causes of Electricity Crisis:

The Electricity Crisis of Pakistan is due to the reason that there is a lack of management and lack of foresight by the government of Pakistan. It is also due to the reason that there is a lack of responsibility and awareness among the citizens of the country.

All the resources that are available to Pakistan are way too out of reach as they are simply too expensive or already acquired by some other country which has planned their electricity consumption. Pakistan has failed to find sufficient amount of energy resources as it had delayed in making better decisions and planning the electricity consumption of the country.

Some of the causes of this crisis are discussed below:

One of the most common practices in Pakistan is leaving the lights switched on, even when they are not needed. Not only the lights but also the home appliances are left switched on without realizing that the electricity that is being consumed by the appliances is just being wasted. Similarly, many businesses like shops dealing in clothes and garments, home appliances, electronics, grocery, cosmetics and jewellery are extravagantly lit. Hence, it is observed that shops which can meet their desired level of exposure with two to four tube lights are using as many as 15 to 20 tube lights to meet their desired level. This practice does not only increase power consumption but it also generates heat energy which makes the environment uncomfortable and also makes a negative effect on the ozone layer.

The energy crisis in Pakistan would not have been this difficult to handle but it was made a big problem by following defective policies. Circular debt is one of the causes of the crisis. The question that comes to mind immediately is that what circular debt really is? Circular debt means that the private electricity generation company keeps generating the electricity but they do not get the payment from the government for the power they have provided. Thus, the electricity generating company stops the supply of power after a

limited period of time and after that when outstanding amount to be paid by the government crosses the limit; these companies stop the production till they get paid back by the government. This have been happening a lot recently, currently what government is doing is that they let the circular dept build up and while companies stop producing till they are paid back after many months and mean while that close down brings in more shortage and more electricity load shedding afterwards.

Another trigger to the electricity crises was the dry December in 2007 that resulted in the decrease of water levels in the dams of Pakistan. That had affected the electricity production as water is the source of hydroelectric power. The decreasing rate of rain fall has also reduced the total power output of all major hydroelectric dams. Restrictions have also been placed on the release of water as Pakistan is an agricultural country and it needs water for irrigation as well.

The increase in the cost of fuel has made generation of electricity from thermal units very expensive. It is therefore costing exorbitant price. When WAPDA and KESC purchase electricity at higher cost they are not eager to keep on selling the electricity on loss. Therefore, they do not take in notice the complains of load shedding thyat are increasing day by day. They continue with the continuous load shedding without any concern of how the country will survive without electricity. Prices of fuel have a huge effect on electricity crises because 60% of the electricity produced is through furnace oil.

Power theft is also a very big problem in Pakistan as the most popular Kunda system is being used to steal electricity. If the government takes certain steps to completely remove the transmission of electricity through wrong methods it would be able to save at least 25% of its electric power.

Effects of Electricity Crisis on the Economy and on the People of Pakistan:

Pakistan is facing a lot of serious issues due to the electricity crisis. As the economy of Pakistan is suffering from crisis too due to the electricity crisis, the value of Rupee is falling. Pakistan's small manufacturing markets are being affected severely by the rise in energy prices. Manufacturing industries utilize 33% of production cost in terms of energy prices. An increase in the rise of energy prices will cause a result in the increase of cost of production and thus resulting in the decrease of cost of labour. The cottage industry of Pakistan is taking its last breaths and the textile industry which is one the most important industry of Pakistan is in trouble.

The sector that has the highest rate of consumption is the household sector. The household sector consumes around 44. 2% of the total electricity produced. The electricity crisis has literally paralyzes the cities and villages of Pakistan and has made the life of the citizens a living hell. The unscheduled daily load shedding also had negative effects on the life of the people. Some problems faced by the people due to load shedding are that the children weep in the night due to high temperature and mosquito bites, students cannot study at night, industries are being shut down, machinery cannot function properly, surgeons cannot carry out their surgeries, fertilizers and pesticides cannot be manufactured etc. These problems

clearly indicate that use of water for the generation of electricity is thousand times better than wastage of water on land or in sea is not feudal, because water is wasted in land or sea is nor recoverable but water used for generation of energy can be further used for agriculture and industry. And thus, there will be no shortage of water.

Investment for MNEs in Pakistan:

Pakistan has been known internationally for war on terror as it strategically plays a key part in this war but its performance heavily depends upon its economic conditions, which are very volatile. However, it still invites the international markets to invest in it and increase business activity because it provides: cheap land tax, free zones for industry and does not put obligation off transferring percentage of profit to other land. The banking system of Pakistan is sufficiently effective to provide bank drafts and L/C to any MNE and to give easy loans or provide transactional modes within a country and internationally . The Government of Pakistan with assistance of State bank of Pakistan has drafted all easy policies to attract foreign companies toward the unexplored market of Pakistan. Better economic conditions of Pakistan will help it to fight terrorism but it has also a far good implication for global economy. When investment will come, MNEs will also introduce setups, such as an implant setup, which includes plants, factories and other outlets. Therefore, the investments will come either from local markets, by an increase in employment in Pakistan or by the import of machinery. Manufacturing demands and orders will be made, as a result economic activity will be generated and people will have a demand for basic things. They are willing to pay despite of inflation rising to almost 15 to 16%. In

Pakistan, we must understand that the investment should be in dollars and it shouldn't be evaluated in terms of Rupees. The major concern is whether rupee will sustain a value, for only then, repayment could be possible. This will increase the burden of the people as well as the time for repayment will be squeezed, and exchange rates will alter drastically. However, in recent analyses in Pakistan hard currency reserves are stable and no drastic changes in exchange rates are available so it is a good time to invest.

Now the question that rises is that which particular sector should the MNE's invest in and why? For this it is necessary for the MNE's to know where there is problem in Pakistan and where it needs investment. After thorough research it has been concluded that the most recent crisis that is being faced by Pakistan is power shortage which means that Pakistan does not have enough resources to increase its electricity generation to meet the demand of two target markets. One of them is the household sector and the other is the industry, both are suffering badly. To keep the industry running the household sector suffers electric load shedding (an average of 10 hrs of load shedding daily).

What the government of Pakistan is planning is to start developing projects which would include dams and hydal power plants. But the problem that occurs is that it needs expertise and big investments as the shortfall that Pakistan is facing is in range between 3000 MGW to 7000 MGW and the demand is increasing by 9% to 11% per year. The present supply of power that Pakistan can produce easily is 20800 MW which is very less than then what the demand actually is. The actual combined demand from home and industry is approximately between 27000 to 30000 to run country's economy

without disruption. The government has predicted that the demand will increase to 40000 to 50000 MW. Hence, shortfall if conditions remain same will increase to 13000 MW to 18000 MW. This huge deficit is the reason that Pakistan has invited MNE's to come in Pakistan and invest. The biggest suppliers of electricity in Pakistan are WAPDA and KESC. KESC has to control electricity demand in the industry while WAPDA mainly has the domestic control. Now we must know that what the cost of development is of "HYDRAL POWERPLANT". Things that must be evaluated initially are investment cost, operational cost and expected cash flow in first year. All by which net present value can be known. Now by our research we can conclude that some basic initial investment and requirement of Pakistan is to build small dams which should have reservoir capacity of 1000 cm³ to 50000 cm³ of water. These dams would cost in between 460 million USD to round 700 million USD. This is the initial estimated infrastructural cost of these plants. The operating cost estimated per year of a small plant is approximately 100 million USD which can exceed on several points. Such as:

- spill way debris cleaning
- gates operation
- risk management and compliance procedure
- depreciation cost
- Insurance cost ,

The point that should be considered now is the cash flow or profit that the MNEs would get and what will be the annual gross profit for their investment

that they would make to cover the shortfall of electricity. Pakistan has short fall of 7000 MW, and the recent price of the rental power plant project proposed by the Turk companies charged 6 rupees per unit as there are 100 units in 1W, the selling price to WAPDA was 600 rupees. Here we must know there are 1 million watts in 1 MW so if MNE sells 1000 MW which is required by a medium sized dam it makes a total profit of 7 million USD on monthly basis. This profit made is just sufficient enough to carry out all the operations for the generation of electricity. Another way to supply electricity instead of selling it to retailer like WAPDA is a direct connection that can be given to domestic range and industry; this would result in higher profit as it is observed that per year the demand is growing by 9 %. Direct connection also allows the MNEs to charge more and also benefits them more as it's a tax free zone and it's just pure profit. Generally the time set for the completion of a project is 10 years and according to the calculation of profit the investment by the MNE is cashed within 2 years. Therefore, the remaining 8 years is pure profit. Hence, the investment is sufficient as ensured by the Government of Pakistan.

In order to meet the needs of electricity in Pakistan the government has come up with a program named “ Vision 2020 Program”. In this program they have planned to increase around 20, 000 MW into the system. The investment for this program is estimated to be \$3. 2 billion (USD). Another investment is done by the South Korean Lotte Group. They are installing a \$45 million (USD) power plant which will generate 40 MW of electricity. Although this power plant is being installed to reach the energy requirement of the Lotte Pakistan PTA LTD (which is a textile manufacturing company).

But they also intend to sell electricity in order to earn profit. According to the research, Access International has also proposed to invest in the power sector of Pakistan in the next five years. This investment would be of around \$1.2 billion and would generate approximately 1000 MW of electricity.

These investments would not only help generate electricity and decrease the energy crisis of Pakistan but will also help in increasing the employment rate of Pakistan. Unemployment is also a very big economic problem in Pakistan as the rate of unemployment is very high. When the MNEs will invest in the power sector it will automatically increase employment and thus decrease the rate of unemployment in Pakistan.