

Imbalance of energy mix in Pakistan and its Consequences

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Essay:

After suffering decades of electricity shortages that left families and businesses in dark, Pakistan finds itself with a new problem: new electrical generating capacity than it needs. According to Tabish Ghauhar, a special assistant to prime minister on power, we are producing much more than we need. But even ^{as} supply surges, electric power is still not reaching up to 50 million people in Pakistan who need it, according to the World Bank Report. Excessive fossil fuel energy ^{is} also boosting electricity costs, and raising question about whether country will now manage to achieve its climate goals, with scientists saying coal needs to rapidly disappear from world's energy mix to prevent the worst impacts of climate change.

The life and processes that take place across whole world depend on Energy. Since many Production and consumption activities need energy as their primary output, and it is highly important for economic development of country. Energy industry in Pakistan is in crisis, due to lack of energy output to keep up with the country's rising demand during the past few decades. Now, Pakistan is reliant on the imported energy resources like gas and oil. According to Shazia Anwar Cheema Pakistan might face an extremely challenging and disastrous winter as result of lack of long term energy management strategies by policymakers.

In Pakistan, the energy mix has historically been dominated by fossil fuels, particularly natural gas and oil. The consequences of imbalance ^{due to} includes: Reliance on fossil fuels

for combustion fossil fuels release pollutants like sulfur dioxide, nitrogen oxides, and particulate matter, contributing to poor air quality, respiratory problems and various health problems.

Burning of fossil fuels releases significant amount of carbon dioxide and greenhouse gases, which leads to global warming and climate change. Mining and drilling activities associated with the fossil fuels lead to habitat destruction, soil erosion, and disruption of ecosystem, affecting biodiversity.

Pakistan due to high dependence on energy imports, experiencing trade imbalances and increased pressure on foreign exchange reserves. This crisis is likely to worsen due to Middle East countries, which serve as the major source of imports, being severely impacted by strain that Europe is experiencing as result of fuel and gas shortfall. Reportedly Rs. 1.5 trillion is owed by Sui Southern Gas Company Ltd (SSGCL) and Sui Northern Gas Pipeline Ltd (SNGL) to oil and gas development company (OGDCL) and Pakistan Petroleum Ltd (PPL) - the mainstay of oil and gas exploration and production in Pakistan. This low cost domestic energy source costs less than half as much as

imported LNG, which Pakistan is using more of. Texti Moreover, at a staggering 2.5 trillion Pakistani Rupees, the circular debt is 10% more than it was in the previous fiscal year. By 2025, it is anticipated to reach 4 trillion Pakistani Rupees, according to studies. It will be surprising to know that developed countries like China and Japan are also energy insecure. The 2nd largest and 3rd largest economies of world, respectively, are not secure as far as their energy needs and production are concerned. This is because energy insecurity is defined based on whether a country is self producing the energy for its requirements, or whether it is an exporter of energy to other countries.

Along these lines, energy security for self producing country can be defined as having available, accessible, and affordable energy all the time. Similarly, if a country is an exporter, then the energy security depends on its ability to keep the supply demand high and global energy resources under its control. If it is importer, it must keep

the energy prices and global energy markets under its influence as well as strive to keep its balance of payments positive.

If there is not enough of right kind of energy, some areas might not have even enough electricity. This means, people might face

problems with lighting, cooking and running appliances, impacting their daily lives. Additionally, But shifting to more balanced energy mix, including renewable energy, could create jobs. Depending too much on certain types of energy can make the cost of living higher. If those energies become more expensive, it might be harder for people to afford the things they need, like electricity for their homes.

Power shortage and fluctuations can lead to public dissatisfaction, such as citizens often hold government responsible for providing the stable and affordable energy. This dissatisfaction may manifest protests, putting political pressure on the ruling party.