

Essay Mock

- 2) Imbalance of energy mix in Pakistan and its consequences.

Outline

- 1) Introduction

Thesis Statement: Pakistan continues to suffer from persistent energy crisis. Years of neglect and apathetic attitude towards the energy sector has led to an imbalance of energy mix that is contributing to the current plight of the country. However, by introducing meticulously planned reforms and stern policies, the shipwrecked country can be steered to safer shores.

- 2) Why is there an imbalance of energy mix in Pakistan?

- 3) Major factors that have led to an imbalance of energy in Pakistan

- a) Heavy reliance of non-renewable means of generating energy.
- b) Kirkbacks and commissions of imported hydrocarbons keeps government from switching over to renewable source.
- c) Government's apathy towards the energy sector.
- d) Long-term agreements with independent power producers.
- e) Scant number of adept engineers that can superintend the transition from non-renewable to renewable energy sources.

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4) Consequences of imbalance of energy mix on the country.

- a) Perpetual Current Account Deficit.
- b) Shortage of energy leads to energy crisis
- c) Global trends have a huge impact on the economic landscape of the country.
- d) Heavy reliance of non-renewable energy sources causes pollution
- e) Natural resources in the country are depleting

5) Ways in which Pakistan can triumph over the issues.

- a) Invest in the energy sector
 - b) Revisit the agreements with IPPs and change them into short-term agreements.
 - c) Embellish the pay package for qualified engineers who can oversee the transition projects.
 - d) Seek foreign collaboration in renewable energy production projects.
 - e) Diversification of energy sources.
- 6) Conclusion

Although the proverbial rabbit had more speed and skill, he took the race far too easy and slept on the way. The tortoise, on the other hand, was bereft of the speed and skill that the rabbit enjoyed, but had only one quality that

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gave him an edge over his counterpart and eventually led him to win the race. That quality was his persistent hard work. Similarly, the Pakistan is blessed with countless resources and immense intellectual pool, but the country's lack of commitment and hard-work have caused us to lag behind in the race of global superiority. There are a myriad of reasons that can be attributed to energy crisis grappling the country, to name some: heavy reliance on non-renewable energy resources, prevalent corruption, lack of government's attention and brain drain. These are some of the reasons why Pakistan continues to suffer from energy crisis. Years of neglect and apathetic attitude towards the energy sector has led to an imbalance of energy mix. However, by introducing meticulously planned reforms and stern policies, the shipwrecked country can be steered to safer shores.

An imbalance of energy mix refers to a situation where the sources of energy production are disproportionately skewed towards one type of energy production source. In context of Pakistan, the problem lies in over-dependence on non-renewable means of

producing power, typically involving hydrocarbons, such as coal, LNG, natural gas. Balanced energy mix, on the other hand, encompasses combination of various source to generate electricity. This can involve both renewable and non-renewable sources.

One of the critical, if not the most crucial, reasons for such an imbalance energy mix lies in Pakistan's over-dependence on non-renewable means of producing power. Contrary to other advancing countries, Pakistan remains adamant on solely relying on such antiquated sources of energy production. Many countries, regional and global, have rightly understood the significance of a sustainable production mechanism for a prosperous future, and in doing so have completely revamped their system to derive energy from an eclectic mix of sources. Regrettably, the situation in Pakistan is quite different. Reinforcing the thought, International Trade Administration indicates that Pakistan produces 63% of energy from fossil fuels. These stats underscore the flaws in Pakistan's production sector, and serves as a clarion call for improvement.

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To anyone accustomed to life in Pakistan, the pervasive corruption should come as no surprise. Many political leaders and personalities of such stature have repeatedly been accused of corruption. For people of such ilk, their aggrandisement always comes first, even at the cost of country's interests. Ceaseless corruption and kickbacks have also stymied the energy sector. Many ministers, for their own kickbacks and pilferage, want the country to continue its reliance on foreign hydrocarbons. The former prime minister of the country, Shahid Khaqan Abbasi was also accused of committing corruption in a multi-billion-rupee LNG import contract, [Dawn News, 2019]. This highlights the fact that interests of few individual will outweigh the interest of the entire nation.

The dilapidation of the energy sector can also be ascribed to the apathetic attitude of government in fixing the issue. For many many decades, the energy production sector has been ignored, leading to its eventual enfeeblement. The growing energy related crisis should have served

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as a wake up call for change, but the ruling elite remained heedless. The current energy sector is inefficient and grappled with many problems. The limelight of such governments is to initiate frivolous but tangible projects that can be highlighted during their election campaigns. Since transitioning to diverse and sustainable energy sources draws little attention of public, such significant tasks are ignored. Profit by Pakistan Today indicates that, in the fiscal year 22-23, the government allocated 75 billion for power sector subsidies. Such immense allocation of subsidies reflects the government's intention of fixing the matter temporarily through cosmetic measures and ~~not~~ leaving this predicament for the coming government.

long-term careless agreements with independent power producers have also marred the energy production capacity of the country. Such contracts might seem innocuous, but have a profound bearing on power generation. It means that IPPs can continue with the antiquated means of energy production with immunity. The government loses its prerogative to

demands IPPs to update the production means unless the contract expires and needs to be renewed. Moreover, the agreements stipulate that the government is obliged to make capacity payment to these IPPs, meaning government has to pay them irrespective of whether they produce electricity or not. This is a damning indictment of the government's incautious spending of the people's hard-earned money.

The ineptitude of the private sector can also be attributed to the prevailing brain drain crisis engulfing the country. Most of the talented and skillful individuals have no choice but to leave the country but to pursue their employment endeavors abroad owing to the country's subpar and emaciated private sector that cannot provide for them. Consequently, most of the skilled professionals leave the country, which further contributes to the plight. According to DW news, around 200,000 Pakistanis left Pakistan in the first 3 months of 2023, with the trends showing no signs of abating. This exodus of the country's intellectual

This point underscores the growing scarcity of capable professionals that can superintend major projects.

The persistent enfeeblement of the country's archaic energy production sector has resulted in it lagging behind many of its counterparts regionally and globally. Such a vital sector being unmordinized can have dire repercussions for the country which are not solely circumscribed to energy related crisis but span economic dimension as well. Over-dependence on hydrocarbons to produce energy has immensely contributed to the country's current account deficit. This is because Pakistan imports most of its hydrocarbons from abroad. International Trade Administration indicates that Pakistan imports over \$ 16 billion worth of hydrocarbons annually to meet its energy demands. This underscores the urgent need to address this issue for it alleviate the economic strain.

Another consequence of having an imbalance in energy mix is that it invariably leads to shortage in energy production which, in turn, induces energy crisis. Deriving

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a major chunk of energy need from one source is always risky, in particular when the source pivots on a country's imports. Any fluctuation ~~or~~ or delay in imports can have dire ramifications. The experience of Europe serves as an excellent example who, in the wake of Russian invasion of Ukraine and subsequent sanctions, have to deal with serious repercussions owing to Russia's halt of gas supply. This serves as an impetus for many countries like Pakistan to conceive self-sustaining power generation means.

Much like how narrow-range of energy sources can cause energy crisis, it can also make a country's economic outlook susceptible to global trends. This is because if a country's energy sector is interwoven with global supply chains, the slightest disruption can impair the energy production. International Monetary Fund indicates that, in the aftermath of Russian invasion of Ukraine, severe disruptions in the hydrocarbon supply chain were witnessed, which drastically amplified inflation in many countries that heavily relied on GCC's

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hydrocarbons for energy production. This reinforces the belief that depending on external resources for hydrocarbon can make the power production sector more volatile.

Another major impact attributed to imbalance of energy mix, especially if energy source is disproportionately skewed towards non-renewable means of production, is pollution. There remains no ambivalence that one of the major causes of pollution is the burning of fossil fuels. The rationale behind this is that fossil fuels ~~heat~~ release Nitrogen gas when burned, which leads to the formation of smog and acid rain. Science Direct indicates that Pakistan relies on fossil fuel burning to meet almost 84% of its energy demands. Such extensive use of fossil fuels have permeated pollution to most parts of the country with notable cities like Lahore ranked the most polluted in the world. Such pervasive pollution gives all the more reason to switch to more environment friendly ways of producing power.

Extensive use of fossil fuels can also deplete the natural resources of a country. Natural resources take centuries to form and, if not used wisely, can wither away. A country that does not invest in alternative power generation methods and solely depends on its natural resources is bound to face problems.

Ministry of Planning Development & Special Initiatives expressed concern over the depleting local gas reserves which have fallen to 20,951 cft. The swift decline in the gas reserves underscore the severity of the issue and serves as an impetus for the country to revamp its beleaguered production sector.

The embaciated energy production sector, albeit in a plight, can be ameliorated if robust actions are taken. One way to address the plight is through investing in the sector. As aforementioned, it took years of neglect to cause such fragilisation. There is now a dire need to allocate adequate funds for the sector in order to revamp it. Dawn News 2023, draws attention to mammoth

subsidies ~~at~~ worth over Rs 1 tm for the energy sector for fiscal year 23-24. However, these subsidies are a rather cosmetic measure aimed for a temporary solution which would only add to the problem in the coming years

The governments of Pakistan have committed horrendous blunders in formalising agreements with independent power producers. The current predicament of the country's dilapidated power sector should serve as a stimulus for the government to revisit these contracts. The government should practice utmost circumspection in reading all the terms, eradicating possible loopholes that might pose a challenge for the country in the long term. Moreover, the contracts should be amended and should explicitly mention that all payment will be made in Pakistani Rupees.

Brain drain, as mentioned earlier, is another problem for the country. The dearth of professionals make it all the more hard to pursue reforms or

making large-scale changes. The fragile state of the economy and the regressed private sector repel expert. The economy of the country would take a long time to stabilise but the government can embellish the pay package of experts in a bid to spur their interest in repatriation. Such experts can directly work with the government, weigh in on any purposed reforms, and superintend mega-scale projects.

Given the fragile state of the production sector, it is imperative that the country seeks foreign collaborations. Any investments in renewable power projects can not only be fruitful for Pakistan by can yield lucrative returns for the investor. The government should also try and embellish the energy sector by providing incentives, and removing unnecessary hurdles in order to make the environment conducive for initiating project. By stimulating such collaborations, the deteriorating condition of the power

sector can be mitigated.

Diversification is energy production methods can go a long way in ridding Pakistan from imbalances in the power sector. The government need to introduce variety of energy sources to create a more balanced and resilient energy mix. This can include incorporating renewable sources such as solar, wind, and hydro. Moreover the amalgamation of these such eclectic range of energy producing methods can forge heightened synergy that can address the power related woes of the country.

In a nutshell, Pakistan is grappling with a plethora of energy-related problems. These challenges can have a very detrimental affect on the country, with consequences spanning energy, economic, and political dimensions. Years of neglect and seeking refuge in a solitary means of energy generation has rendered the power sector in effective. This might seem like a daunting task but with meticulously designed reforms, aimed at addressing the

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the issue at a grass-root level, and by establishing stringent policies to uplift the power sector, the shipwrecked, albeit engulfed with many challenges, can be steered to safer shores.

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