

(Q 2)

Among the countless challenges Pakistan is grappling with, circular debt stands out as a particularly serious issue. Circular debt refers to the non-payment or delay in payment within the energy supply chain, involving power generation, distribution, and payment by end-users. This outstanding liability can strain the energy sector, which, in turn, has dire repercussions for the socio-economic outlook of a country. Some of the major reasons of Pakistan's circular debt are as under:

### Root Causes of Pakistan's circular debt issue in energy sector

1) Subsidized Tariffs:

The government of Pakistan has been providing subsidies on electricity tariffs to keep the price lower for the consumers.

This leads to a tariff differential where the cost of electricity/energy produced exceeds that of the what the consumers pay.

This has by far been the major cause of circular debt issue in Pakistan. The Finance Department indicates that Pakistan's power sector has been allocated subsidies amounting to Rs 6 trillion in the last 15 years. Such ~~high~~ substantial subsidies ~~are~~ are the major ~~issue~~ cause of circular debt issue.

## 2) Inefficient Power Generation:

Pakistan's power generation infrastructure is outdated which makes the cost of power generation more expensive. Moreover, Pakistan heavily relies on one source of energy production: Thermal power, which

According to Pakistan Economic Survey 2023, accounts for 58.8% of total energy production. Such heavy reliance on one source of energy production coupled with poor infrastructure has exacerbated Pakistan's circular debt crisis.

### 3) Expensive Long-term Agreements with IPPs:

Expensive and ill-thought-out agreements have created major problems for Pakistan's energy sector. The governments have ~~made~~ agreements that make them liable to pay capacity payments to independent power producer. This means that the government is required to ~~make~~ give capacity payment, amounting to 33% of the total amount, to these IPPs irrespective of how much energy is purchased or produced. Furthermore, these agreements require the government to pay these IPPs in dollars.

which strains the foreign reserves. To make matters worse, these agreements are long-term agreements, meaning ~~that~~ these is ~~no~~ exorbitant prices need to be paid for several years before the government can renegotiate.

#### 4) Non-Payment / Non-Recovery of Bills:

There are inadequate mechanisms in place to ensure the consumers pay their power bills. Many consumers get away with not paying power bills. The government's insufficient actions towards those who do not pay bills provides others with an impetus to do the same. This non-recovery of bills further ~~strains~~ financially strains the ~~emaciated~~ distribution companies, adding to the country's circular debt issues.

## 5) Inefficient Power Distribution :

Pakistan loses a high percentage of electricity ~~through~~ because of the old and damaged transmission lines. Pakistan loses around 20% of electricity due to transmission lines, while other countries in the region lose way less, e.g. India: 9%, Afghanistan 12%, and China 3%. Such high transmission losses ~~further~~ reduce the revenue generated by the distribution companies, further adding to the country's circular debt issue.

## 6) Electricity Theft / Pilferage :

Electricity pilferage is a underlying cause of Pakistan's increasing circular debt. Many people try to steal electricity by using the "Kunda system". As a result the power bills ~~are~~ comes way lesser than the actual electricity they use. This is

another cause for the decrease in revenue generated by the distributing companies, exacerbating circular debt crisis.

### 7) High Inflation:

An indirect cause of the mounting circular debt is high inflation. Pakistan's Economic Survey 2023 shows that national consumer price index stood at a staggering 29.2% between July to may fiscal year 2022-23. Such high inflation decreases the nation's capacity to spend on energy. As a result, the revenue of the distribution companies decrease, adding to the circular debt crisis.

Sustainable solutions to break the cycle.

## 1) End Subsidies:

Subsidies are the most critical cause of Pakistan's circular debt issue. Allocating subsidies might provide temporary relief to the consumers, but in the long-term can prove detrimental for the country. Hence, there is now more than ever the need to end these subsidies in order to deal with the long-standing circular debt crisis.

## 2) Revamp Power Infrastructure and Transmission Lines:

The Power infrastructure has been neglected for far too long, resulting in the expensive and ~~poor~~ ~~poor~~ inefficient power generation and distribution. Similarly, transmission lines should also be revamped: to cut ~~at~~ the losses short. Mianwali to Lahore transmission line project under CPEC which approximately covers

900 KM, can go a long way in decreasing the country's transmission losses. However, this single project cannot be solely relied upon to alleviate the country's circular debt crisis, and hence similar projects are needed to make an impact and break the cycle of circular debt issue.

### 3) Create a More Balanced Energy Mix:

As already mentioned, Pakistan relies heavily upon thermal power generation. However, in order to create a more sustainable and economical power sector, it is essential Pakistan diversifies its power generation methods. Reinforcing this thought, Agora Energie wendie, a German based think tank states that Pakistan has the capacity to produce 33000 MW of electricity through solar and hydel sources. Hence, diversifying energy production can break the cycle of circular debt issue.



#### 4) Enforce suitable Punishments for Electricity Theft and not paying Bills:

The government needs to take stern measures to ensure that perpetrators of energy pilferage as well as those who don't pay bills ~~are~~ are brought before law and strict punishment is dispensed in order to deter people from following such unlawful practices.

### Conclusion

To sum up, Pakistan is engulfed with severe circular debt issues. Although ~~the~~ navigating <sup>the</sup> country away from this crisis might seem like an arduous and daunting task, but by ~~the~~ introducing meticulously designed policies and by taking strict measures, this problem can be ~~be~~ alleviated. The solutions embodied in this answer can

make an impact on the country's power sector and can go a long way in breaking the cycle of this circular debt crisis.

(a1) Education and skill development have a direct impact on a country's economic outlook. This is an established fact ~~at~~ that is supported by evidence by various countries across the globe such as Singapore. Pakistan's education sector and skill development programs have never been on the priority <sup>list</sup> of ~~the~~ any government, which is why Pakistan lags behind many countries regionally and globally in ~~the~~ ~~an~~ competitiveness and in innovation. World Bank Report (2022), indicates that Pakistan spent a mere 1.97% of the country's GDP on the education sector. These findings

serve as a testament to the government's lack of priority to education and skill development. Focusing on education and skill development can foster economic growth in a number of ways, some are as under:

## Role of Education and Economic Growth in Pakistan

### 1) Increased Productivity:

Education enhances productivity of individuals. Well-educated and skilled workers tend to be more ~~to~~ adaptive to latest technologies which makes them more productive. As a result, this increased productivity can raise the overall productivity of various sectors.

## 2) Exporting services; Source of employment

Pakistan is one of the largest services exporter in the world. Express Tribune indicates that free lancers in Pakistan earned \$400 million in 2022.

In this way, by providing education and skill development programs to more people, the country can generate more revenue as well as more people will find employment through exporting services.

## 3) Foreign Reserves can be increased:

Pakistanis that ~~pay~~ earn through free lancing or by ~~other~~ exporting other services are paid in dollars and Pounds. This can be a major source of replenishing foreign reserves and hence foster the country's economic growth.

## 4) Poverty Alleviation

Educated and skilled populace can contribute  $\$$  in poverty alleviation. In this age of technology, no longer do people have to rely on the country's emaciated private-public employment sector. People can use ~~#~~ ~~mobile~~ different technologies to earn.  $\$$  State Bank of Pakistan states that Pakistan has the capacity to accelerate GDP by 36 billion and create 4 million jobs by 2025 by increasing the use of digital financial services. Hence by educating people and <sup>by</sup> providing them skills, the country's poverty can be reduced.

## 5) Competitive Populace means higher remittances:

Most of the Pakistan's ~~remittances~~ remittances are sent by labourers who can

hardly make ends meet. These labourers can only secure low yielding jobs such as taxi drivers, construction workers etc, consequently they can ~~only~~ only send a small amount back home.

However, if Pakistanis are provided quality education and proper skill development that can enable them to compete with their foreign counterparts for high-yielding jobs, Pakistan's remittances can increase substantially. This can set the country on the path ~~for~~ of economic growth.

Policies to enhance the quality of education and address unemployment.

## 1) Increase Spending on Education

Pakistan's education sector is in serious crisis. A report by

Date: \_\_\_\_\_

Alif Ailaam shows that 48% of the country's schools lack even the basic infrastructure like walls, tables, chairs. Hence it is essential to increase the spending on education sector in order to enhance ~~of~~ the quality of education.

## 2) Introduce Training Programs for Teachers

Pakistan's teachers have no prior skill set or training of how to give lectures. The example of UK serves as a good inspiration. UK has a CETS training course for teachers to undergo before they can start teaching. By ~~intit~~ following similar ~~#~~ policies, the quality of education can be improved.