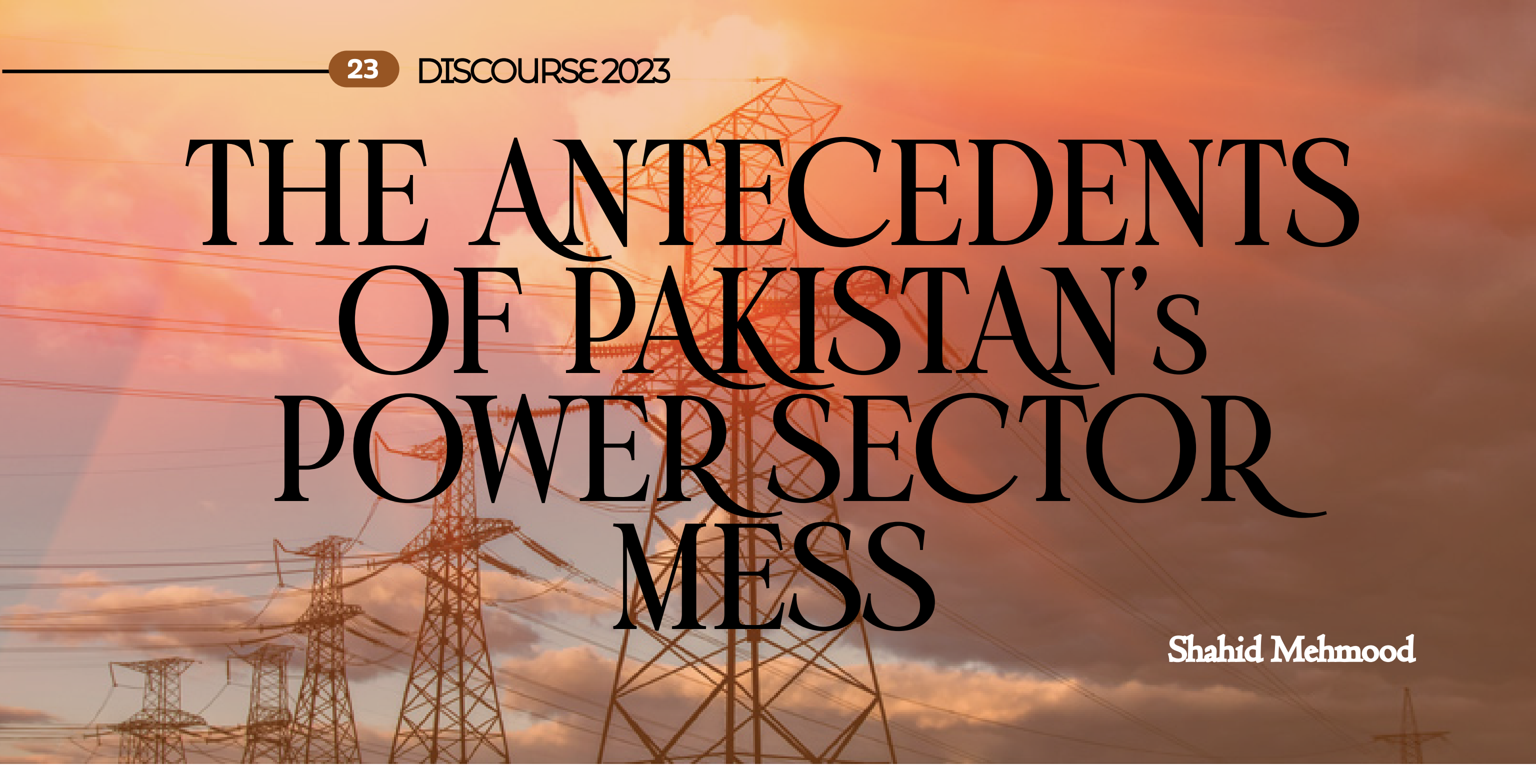

THE ANTECEDENTS OF PAKISTAN's POWER SECTOR MESS

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Pakistan's power sector is in the news again, given the inflated electricity bills and the countrywide protests against them. As expected, the ensuing debate has largely centreed upon the usual figures of circular debt, payments to Independent Power Producers (IPPs), thefts, line-losses and management issues at DISCOs level, etc. However, this was not always the case! What is missing from most of these debates is the evolution of the issues plaguing the sector, whereby some critical aspects and realities remain lesser discussed (especially economic and historical aspects in a wider context). Without understanding these, the contents of today's problems cannot be understood properly. This article intends to bring forth these lesser discussed aspects.

The article covers the electricity sector, which is an ample reflection of the power sector (which also includes natural gas) because issues are pretty much the same. This essay relies heavily on the outstanding work by Dr. Afia Malik and Dr. Nadeem ul Haque, whose research was recently published by PIDE[1], a definite read for anyone wanting to grasp the intricacies involved. This article should be taken as an extension/-continuation of it rather than as a substitute to their work.

Briefly put, the story of the decline of this sector involves politics, rent-seeking, regulatory capture, greed/corruption, incompetence, donors, the pitfalls of centralisation, and more. We begin with the fact that Pakistan's power sector, initially run by WAPDA, was once envy of many around the globe. Having successfully built and operated mega projects like Tarbela and Mangla (built to meet rising electricity demand) and handling the distribution system amiably, it saw its gradual downfall starting in the 1970s, especially with the advent of Martial Law in 1977, with a former Member Energy at Planning Commission blaming the decline on induction of army personnel in the organisation[2], something that continues to this day. WAPDA is still there, with yet another retired, corrupt General running it[3].

This decline had many repercussions, foremost amongst them being that a country endowed with tremendous hydroelectric potential became subservient to imported fuels. Aside from induction of non-professional personnel into WAPDA and its institutional capture, this also opened the way for IPPs to descend on Pakistan, encouraged by our own Government and donors. The momentum of producing electricity from hydro and other domestic sources came to a halt. Making an excuse that Kalabagh Dam was controversial (laying the ground for private IPPs on thermal fuels) discounts why other dams (small, medium or large) were not built? There was no disagreement on them! Case in point: Gomal Zam Dam in South Waziristan. Conceived in late 60s, initial studies were completed by early 70s. There was absolutely no disagreement on it. Yet, work on it started in 2001, starting electricity production in 2014. The change in the sector's dynamics can be gauged by the fact that a large portion of the hydroelectric projects like Neelum-Jehlum, Karot, etc., are now running on IPP mode.

[1] Power Sector- An Enigma with no easy Solution',
[2] https://tribune.com.pk/story/2298003/failure-of-the-power-sector-after-1970s-1
[3] https://www.youtube.com/watch?v=Lw9B9ZqnApQ

We now turn to the advent of IPPs and the expansion of bureaucratic hold on this sector. In both these cases, complementing the mediocre WAPDA management was the equally dubious role of donors, something that rarely gets mentioned. All along, in this power saga, they have had a very questionable role. Back in 1981, the Government's own Economic Survey stopped short of directly accusing them of buildup of foreign loans (USD 9 billion at that time) by pushing for big-ticket, long gestation projects that had questionable utility to begin with. Parsing the stats over time, some are quiet revealing, especially the stats about loans directed solely at power production and investment, but little or none in Transmission and Distribution (T&D), likely because it doesn't offer fixed returns or dollar indexation.

Onto the vexing question of IPPs. The common understanding/belief is that it was PPP who brought them to Pakistan. But that is false; it was General Zia, who signed onto the establishment of HUBCO in 1988 (based on a previous year's single-page directive that acted as a Power Policy, also initiated and signed by him). That set the ball rolling; In the famous 1994 Power Policy episode, the World Bank's (WB) overzealous role was more than evident, to the extent that it ran from pillar to post to arrange financing from various sources and setting the IPPs. From that time till now, consumers had to pay through their noses to fill coffers of IPPs; the IPP inquiry report in PTIs tenure found that in the last two decades, consumers had been skimmed of a whopping Rs. 4 trillion. If you think that any lessons were learned, think again: further 11,000 MW electricity through IPPs are in the pipeline (another 7,000 MW of CPEC power projects are separate from these)!

In the summary of Power Sector Policies of PIDEs publication4, something striking manifests itself-whenever the power policies have tried to incentivise using domestic resources for production, or tried to move away from fixed returns and tax exemptions, IPPs have shied away. What gives? I tried to find agreements around the globe with such high returns and governments taking upon themselves such a large portion of the risk, but could not locate a single one! In 1994, for instance, India had a larger risk profile than Pakistan, given that it was on the verge of default in 1991, its economy on the brink of collapse. So did India sign up on such arrangements in the vicinity of that time? I didn't find any. Perhaps the reader can help me out here.

In hindsight, from a purely economic management point of view (without going into technical details), recourse to imported sources and dollar indexation would have made sense if there were sustained GDP growth that did not give rise to Current Account (CA) deficits. Historically, Pakistan's economy was completely opposite to such a happenstance (and still is), a fact that was known even at the time of signing up all these agreements. It was thus a massive failure (deliberate?) on part of policymakers who could not foresee the issues arising out of imported fuel dependency, an issue that was well-known.

If this were not enough, a few years later the WB came up with another debatable policy in the form of unbundling the power sector into many smaller units. Briefly put, that unbundling in 97-98 has been a profound failure, one that has saddled us with more bureaucracy and more expenses but little in terms of quality improvements! The result is around 20 institutions in the power sector, all occupied by civil and military bureaucracy, with little to show in terms of competency and quality.

A remarkable aspect of all this is that donors have been well aware of our shortcomings and failures all along, especially in terms of completing projects on time, yet are more than happy to provide hefty dollar loans. There appears to be a good reason for that: besides Pakistan being a loan addict, the usual delays in loan utilisation (there's always a condition to utilise loans within a certain timeframe) result in 'commitment charges' on loans (besides interest and principle). In terms of power sector, these are ultimately extracted from the consumer (tell me honestly, how many of you knew about this one?).

Details about this kind of extraction is scarce; in 2017-18, for instance, out of the USD 2.9 billion loaned to Pakistan's power sector by Asian Development Bank (ADB), only USD 400 mil had been utilised! On the unutilised ADB loans, Pakistan paid a commitment charge of USD 7-8 million. In the same year, despite the former unutilised loans, ADB lent another USD 320 mil to Pakistan for power sector projects. This defies logic, does it not?

[4] 'Power Sector- An Enigma with no easy Solution', p.69

This continues, although details are unavailable. Here's a recent example: the Kurram-Tangi Dam. Conceptual work was completed in 2005, but as is typical of the country's economic history, it went cold until the USAID came up with a USD 80 million loan and work finally started in 2016. But more money was required; in comes ADB, recently, with its USD 300 million loan proposal, but under the compulsion that Pakistan will have to hire the services of a Turkish consultant (which Pakistan did). Again, why are these donors so eager to invest in power projects, and mainly in production? And why dump their favoured international consultants upon us?[5] Any chance the people will see the agreement between us and ADB? Nope!

The case is similar in terms of other donors. Back in 2017, IMF, for instance, prophetically warned that most of the agreements signed with Chinese IPPs were non-transparent, and that they may become a significant burden later as profit repatriation and payback on dollar loans (from Chinese banks) are due. Or take the recently signed agreement between China and Pakistan on building another nuclear power plant, rushed into signing by the incompetent PDM government, which will saddle us with a further USD 3 billion in debt. Sadly, one of PTI government's best initiatives, the IPP Report, is also silent on the dubious role of donors in all this.

The next aspect of discussion is the technical fraud that manifests itself in many ways! Someone will have to finance for power sector bureaucracy and IPPs, and for that, whatever works is okay despite it being illegal and illogical. Some are known, others are not. For example, there's a 'depreciation charge' (part of 'net distribution margin') extracted from us in our bills. The story of this charge goes way back to 1890s, when the US Supreme Court allowed this charge under the understanding that the income from it would be used by power distribution companies to regularly upgrade the overall power infrastructure. Now, go around Pakistan and what you'll find is the debilitated state of power infrastructure, especially the T&D (specifically, the peri-urban and rural areas). So what are they charging us for? Then there's 'income tax' in the bills. Seriously? I mean we get income tax deducted at source! So what's with this one?

The running of this sector by civil and military bureaucracy, and having a politically compromised regulator in NEPRA, has significant implications, with a critical one being the total absence of capacity and expertise to check fraudulent practices by GENCOs. This was highlighted amply by the IPP Inquiry Report, concluding that absence of expertise and forensic audit caused massive losses to the consumer as GENCOs[6] kept overcharging them. Despite this, under Ishaq Dar, IPPs were paid Rs. 450 billion in one go without any audit. Back in 2019, a research piece estimated that IPPs were being paid USD 27 million per annum as 'returns' when it should have been USD 6.2 million at maximum[7]. Well, as expected, no lesson was learned; it's business as usual for GENCOs as they continue to garner hefty returns without any forensic audit[8].

The pitfalls of incompetent and unprofessional management running the show doesn't end here. Having central authority makes it easier for the federal and provincial Governments to be one of the biggest defaulters and never pay their bills.

Questionable planning for the sector dots the power landscape: an early attempt to make use of Lakhra coal reserves were discontinued due to poor execution and political hindrances, and the coal reserves of Thar were handed over to that dubious character, Dr. Samar Mubarik, in the 1990s. This pseudo magician claimed that he'd produce enough electricity from Thar coal that Pakistan would export to the whole region! In the end, after wasting billions of taxpayer rupees, he couldn't produce zilch! Yet, he remains out of law's ambit due to the influence exerted by his employer. If the same reserves had been utilised at that that time with the help of private sector, the story today could have been much different. Similarly, Sahiwal coal power plant needs imported coal through a 1200 KM of rail journey. It was purely politics: PML-N showing off with its big-ticket items in an attempt to keep its political monopoly in the Punjab intact. Another example is the Neelum-Jehlum hydro power project, which is two decades behind schedule, for which consumers were continually charged for no mistake of theirs (the 'NJ surcharge'). Last year, as it was about to start production, it came to a standstill due to some 'fault'. The company which was accused of faulty design was again handed a contract to rectify the fault! Until now, this fault has cost the consumers an estimated Rs. 125 billion due to the use of expensive furnace oil, for no fault of theirs.

[5] There are countless examples. NEECA, another useless arm of the Power Division, changed a whole agreement signed with a donor, just because the donor insisted on having their chosen consultant to supervise the project
[6] Acronym for Power generation companies
[7] https://fp.brecorder.com/2019/04/20190407462061/
[8] See https://tribune.com.pk/story/2437101/plants-accused-of-over-charging-for-low-quality-coal

Then there are setups like AEDB and NEECA, filled with bureaucracy and political favorites, but of little or no practical use to taxpayers who have to finance their wages and perks.

Here, in terms of utilisation of domestic resources and poor planning/execution, I am merely touching the tip of the Iceberg. There are innumerable puzzles and controversies that still crave for an explanation. For example, the availability of coal reserves in Khyber and Sahiwal have been known since colonial times. A couple of years ago, while talking to people in KP's Oil and Gas Department, I was informed that there were coal reserves there of the highest quality, matching the best in the world. Yet, we have been importing coal from Afghanistan and other places in the world.
With a centralised power system, politicians and rulers (civil or military) can play around with it to their advantage rather than welfare of the people. Remember that the circular debt reared its head under General Musharraf's government, which refused to pass on higher input prices since elections were coming up. Most of us who were born in 1970s and 1980s might remember the 'mere gaao mae bijli aai hae' (my village has received electricity) advertisements, whereby the government expanded the electricity networks through MNAs and MPAs (through PSDP, under the guise of 'development schemes', another of Zia's 'achievements'). But nobody inculcated in the users that they'll also have to pay their bills, and that the price of the service does not remain stagnant. And of course, there are the power sector subsidies, costing the taxpayers Rs. 3.7 trillion since 2007 to keep this inefficient leviathan running. What better reflection of politics than this?

Political expediency and centralised control also helps to explain a critical issue: electricity theft! Simply put, theft would not be possible without the help of DISCO staff (especially meter readers), the people sitting on the boards of GENCOs (who come to the rescue of thieves every time they are caught), the local administration (police, specifically) and of course, local politicians who always try to protect their voters who steal electricity. That is why merely producing charts and graphs of electricity theft mean little; it would take changes at the aggregate system level to stop this rather than merely cutting electricity meters. For example, we would need to rethink the model whereby the distribution and collection is under the central government, but police and administration is under the provincial government! We recently saw the pitfalls of such an arrangement with PDM in the centre and PTI in KP. Similarly, how many of the DISCO staff are filers? Any account of their total wealth? I know of several Executive Engineer Offices (XENs) who've amassed abnormal amounts of wealth. If there were any reprisals from the system, there wouldn't have been theft!

I now turn to some of the hitherto unexplored aspects of this muddle, which would fit well in any economic analysis of this issue. The first one concerns one of the most destructive policies adopted by Pakistan's economic managers in the form of uniform pricing of commodities and services across the country. The negative fallouts of this policy remains one of the least studied, and underappreciated, aspects of Pakistan's economic management. A detailed discussion is not possible here, but I'll narrate briefly. It's highly illogical and atrocious, for instance, that a unit of electricity produced from a power house in a particular area for Rs. 5 or 6 is sold to the residents of that area at Rs. 60 per unit! GB and KP are two examples where this is happening. Yes, I am aware of the argument about capital investment by the central government for setting up the power houses. But that argument disregards the important query of why provincial or local governments can't have the power to arrange such capital themselves (the 18th Amendment has made it easier, but the centre still has its monopoly).

Mind you, before some friends get riled up, that shenanigans of uniform pricing are as applicable to Punjab's wheat, as well as Sindh and Baluchistan's natural gas as they are to KP and GBs hydro resources. Amongst the many reasons going against this, a primary one is the lack of incentives to specialise and develop skills in what a region/province is good at! Other than that, since there's the all-powerful centre dictating a uniform price, there is little need or incentive to develop an inter-regional/inter-provincial trading market, and thus domestic commerce potential remains unfulfilled.

What is also noticeable is the failure to develop a comparative advantage! As mentioned above, Pakistan had gained quite a substantial amount of expertise in designing, constructing and operating hydro projects by the 1970s. In any country with sound policymaking and able institutions, this should have led to developing a long-term advantage: not only would other countries around the world be requesting Pakistan's assistance in their hydro projects, but a whole industry and services sector would have complemented this expertise, helping Pakistan's exports. The current situation, as any reader would guess, is the exact opposite: Pakistan often turns to Chinese engineers for designing hydro projects, and imports related equipment (aside from financing), thus inflating our imports. This is a noticeable policy failure, something that plagues many sectors in Pakistan.

What the above all clearly demonstrates is that the central government clearly lacks the capacity, skills and drive to run this sector properly. So then why insist on running it? For the same reason that it insists on running SOEs like Steel Mills, PIA, Railway, etc.: they serve as a dumping ground for bureaucracy and political appointees of rulers! Boards of DISCOS, for example, are filled with retired bureaucrats and relatives of politicians. The power sector, which manages all this, is headed by a PAS babu, enjoying considerable perks and privileges. Similarly, WAPDA is now a favorite dumping ground for retired Army men.

The end result is a gigantic mess of cataclysmic proportions, and arguably the world's most expensive electricity per unit. All in all, there isn't much hope; it'll likely get worse.

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