

# Pakistan is Very Rich in Natural Resources but Very Poor in Their Management



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Natural resources refer to such naturally occurring materials and living organisms as can be used by man for economic gains and subsistence of life. Soil, sand, mountains and land, all are natural resources. Minerals, metals, gemstones, air, wind, water and sunlight are also abiotic natural resources. Farms, forests, fields, and their yields are also natural resources. Animals, birds, fishes, plants, crude oil and natural gas are biotic natural resources. Some natural resources are renewable, and some are non-renewable. Renewable resources are the ones which do not deplete noticeably due to human consumption, while non-renewable natural resources are those resources which, once consumed by human use, are not replenished by nature. Pakistan is undoubtedly most richly blessed by natural resources. This divinely gifted country has marvellous landscapes varying from level plains and deserts to lush green forests, snow-clad mountains, and varying plateaus. It also has such extensive glaciers that it has sometimes been called the "Third Pole". This cradle of the Indus Valley Civilisation inherited the world's largest irrigation system and is home to the world's fifth largest nation. Not only the landscapes and scenery but very precious natural resources have also been gifted to this land in bounteous proportions. However, the inhabitants of this wonderful country have mostly not been able to manage its abundant natural resources to get the maximum benefit from them. The poor management of resources has caused their wastage, destruction and underutilisation. This essay will analyse how Pakistan is very poor in the management of its abundant natural resources.

Among land resources of Pakistan, arable land and water hold prime importance as Pakistan is originally an agricultural country with around 62 per cent of its population living in rural areas. Around 40 per cent of Pakistan's workforce is associated with agriculture. Yet, Pakistan is very low on agricultural yields. In the last 15 years, the share of agriculture in the GDP has fallen from around 30 per cent to 19.2 per cent. There has been a slowdown in the pace of technological change in yields per acre during the last 30 years compared to the 1960s and the 1970s. A comparison with the wheat production in the Indian Punjab shows that Pakistan can increase the production of wheat by 40 per cent. The cropping pattern in Pakistan has not changed much during the last 70 years. The same four major crops: wheat, sugarcane, cotton and rice run the wheel of the economy, and no attention is being paid to high-value products such as fruits, vegetables, oilseeds, pulses, etc. Though it is an agricultural country, 10 per cent of its imports comprise vegetable oils and animal fats and 7 per cent of its imports consist of food and livestock. Pakistan did not utilise its arable lands to plant high-value crops and has not been able to achieve any special advantage from its agricultural land.

Besides the production of crops, the potential in the livestock sub-sector has not been fully exploited because of a number of constraints. The yield gap in milk

between progressive farmers and the national average is estimated at almost 60 per cent. Only 3-4 per cent of the milk is processed due to the absence of an integrated and coordinated system of milk collection, chilling plants, refrigerated vans and retail outlets for distribution. Over the last three decades, Pakistan's livestock population has shown less than 3 per cent growth. As of 2015, the estimated nationwide combined population of large ruminants, i.e., cattle and buffalo, was 56.89 million while the population of small ruminants, i.e., goats and sheep, was 80.27 million. These figures prove that Pakistan did not have sufficient animals for its own population. Ironically, Pakistani farmers smuggle a large proportion of their live animals to other countries. Pakistan has a very meagre share in the global halal meat market which is worth \$415b, out of which Pakistan's share is less than 0.5%. Poor policymaking, government oversight and smuggling have made Pakistan incapacitated to accrue billions of dollars from the export of livestock products. Our mismanagement in this regard is disappointing.

Water is undoubtedly the greatest of all natural resources for all life on the planet earth. Some experts believe that with three snowcapped mountain ranges — the Himalayas, the Hindu Kush and the Karakoram — surrounding Pakistan, spanning 11,780 square kilometres with 7,259 glaciers (containing 2,066 cubic kilometres of ice), the country's water source is infinite. However, the Pakistan Meteorological Department (PMD) has predicted that the country will become water-scarce by 2025. With a per person annual availability of water at approximately 1,017 cubic meters, Pakistan is fast closing in at around 870 cubic meters, which indicates that the country is getting water scarce. According to a 2015 IMF report, the demand for water has been on the rise and is projected to reach 274 million acre-feet (MAF) by 2025, while supply is expected to remain stagnant at 191 MAF, resulting in a demand-supply gap of approximately 83 MAF. The water consumed by metropolitan households in a country of above 220 million people is majorly coming from underground aquifers. Pakistan has also mismanaged this precious natural resource. Anyone can install a tube well of any capacity, at any depth, and extract any amount of water. We use freshwater for washing automobiles, pavements, floors and for horticulture. Overground water is also wasted rampantly. 45 per cent of the water withdrawn for use in the agricultural sector is lost through leakage and seepage in the unlined canals. Only a limited amount of the remaining water is actually absorbed and used by the crops due to poor soil texture and unlevelled fields. Our poor management has turned a water-affluent country into a water-scarce place.

Though Pakistan is not an energy-deficient country, we have been suffering from the worst energy crisis for decades. This is because of the poor management of energy resources. In a report "In the Dark: How Much Do Power Sector

Distortions Cost South Asia” the World Bank has estimated that Pakistan is losing a mammoth sum of money to the tune of \$18b annually, while around 50 million people still do not have access to grid electricity. Furnace oil and diesel account for 70 per cent of imported petroleum products. We burn furnace oil to generate electricity, which is the costliest electricity generation method. Pakistan could have saved billions of dollars every year if it had exploited its indigenous energy resources. District Tharparkar in Thar desert of Sindh contains 175 billion tons of coal which can be used to produce 100,000 MW of electricity for more than 200 years. The poor management of this sector is evident from the fact that the Thar coal project has been managed so naively that instead of giving benefit, it has caused us a loss of billions of rupees. The Supreme Court of Pakistan was informed in October 2018 that the coal gasification was likely to result in underground changes that might adversely impact the environment. We learnt this after spending more than 4 billion rupees. Pakistan did not develop cheap hydroelectricity by constructing dams at the right time and let the huge gifts of water coming from the Karakoram and Himalaya ranges drain into the sea without gaining substantial benefits in terms of electricity generation. China added 38000 MW of electricity generated from wind power from 2008 to 2014. We did not even capitalise on this renewable and extremely cheap source of power generation and squandered billions of dollars on furnace oil.

Pakistan is lucky to have a substantial amount of wind. Data based on preliminary site surveys carried out by the Alternative Energy Development Board (AEDB) and Pakistan Meteorological Department have indicated that coastal areas of Sindh and Balochistan provinces, some areas in Punjab and some northern areas possess adequate wind resources. In Sindh province, district Thatta, Karachi, Hyderabad and Badin; and in Balochistan, district Gwadar and Makran Coastal Belt possess prospective sites for the development, installation and commissioning of wind power projects. Thatta corridor presents a good wind resource, and theoretically, over 48,000 MW can be generated there. While China continued increasing its wind power capacities, adding over 6,000 MW in 2008, 12,000 MW in 2009 and 20,000 MW in 2014, Pakistan could not add even 1000 MW in all these years starting from 2009 when its first wind power plant started working in the Gharo-Keti Bander wind corridor. Management of natural resources means you are able to harness a particular resource for your benefit when you need it most, but Pakistan is still not harnessing this resource to get timely benefit and is wasting billions of dollars every year by generating electricity from diesel and furnace oil.

Like wind, sunlight is also the cheapest natural resource that Pakistan has in copious amounts. The renewables of solar photovoltaics (PV) and wind are local resources ideally suited to meet our large energy deficit. Solar PV is the direct

conversion of light into electricity by semiconductor materials, with silicon being the most commonly used semiconductor for the purpose. Silicon is the second-most abundant element in the Earth's crust. We, who boast of making the nuclear bomb, should have manufactured solar panels inside the country to meet the energy needs on time. However, this technology is not being developed at the right time and billions of dollars are being wasted on outdated, hazardous and burdensome thermal power plants which supply 64 per cent of electricity to the national grid along with 30 per cent of electricity coming from hydropower plants and 6 per cent from nuclear power plants. At present, the electricity being produced from solar power plants is negligible, which is another proof that we are not managing our energy resources properly.

Pakistan's province of Balochistan has abundant mineral resources including copper, silver and gold. However, owing to the non-availability of technical expertise, machinery and funds, Pakistan is not in a position to explore, mine and extract these minerals on its own. In the absence of any monitoring mechanism owing to a lack of base-metal analysing technology in the country, the foreign mining companies exploit the situation in their own favour. At one time, the Chinese contractor of the Saindak copper-gold-mine project started extracting far more than the agreed amounts of copper, silver and gold, endangering a decrease in the life of the mine from 19 years to 10 years. However, the matter was properly handled by the Pakistani government later on. But the case of Reko-Diq gold mine did not go well for Pakistan. When the Supreme Court of Pakistan invalidated the agreement between Balochistan Government and the Tethyan Copper Company Ptv Ltd (TCC), the latter went to the arbitration tribunal of the World Bank's International Center for Settlement of Investment Disputes (ICSID) which ruled against Pakistan. The company claimed a recompense of \$400 million, though the matter was later on resolved on a give-and-take-basis between the parties. Neither the provincial government nor the federal government of that time had any idea of what the terms of the agreement should have been. We don't know, even today, the actual estimates of the minerals promised by Reko Diq. Our poor policy-making and management have caused us heavy losses in such projects.

The ruthless erasing of our forests depicts a sad story of how mercilessly we destroyed such assets. At the time of partition, the country's forest cover stood at 33 per cent. By 1990, Pakistan's forest cover had declined to 3.3 per cent which further receded to 2 per cent by 2015. Illegal logging is widespread in the country, and the smuggling of timber across the border to Afghanistan has been a perennial headache. In 2016, Pakistan Tehreek-e-Insaaf (PTI) chairman Imran Khan, who later became the prime minister, claimed that illegal logging by the timber mafia was responsible for over Rs.200 billion in losses to KPK. This great loss of forests

is resulting in soil erosion, flooding, loss of habitat and an increased amount of greenhouse gases in the atmosphere. While PTI claims that its Billion Tree Tsunami initiative has added 150,000 hectares of new afforested land in the province, doubts about these statistics have not been assuaged by Pakistan Tehreek-i-Insaf.

Pakistan was also blessed with huge quantities of saltwater and freshwater fishes and seafood. In the fiscal year 2017-18, Pakistan exported 198,420 tons of seafood fetching \$451.026 million for the national exchequer. However, our government's lack of interest in the fisheries industry is causing it to perform very poorly. The country's fisheries exports declined 7.35 per cent in value to \$11.837 million tons in July 2018 from \$12.776 million in the same month last fiscal year. Quality seafood stocks are depleting in Pakistani waters because of overfishing and use of destructive nets. Further, our major importer of seafood is China, which buys our seafood at very cheap rates. We can easily make Europe our more lucrative market for our seafood, but it needs a visionary and motivated government to capitalise on this natural resource. It again proves that in spite of having abundant natural resources, we are managing them poorly and depriving ourselves of huge economic gains.

No doubt, Pakistan has been endowed with abundant renewable natural resources and vast reserves of non-renewable natural resources, but our bad management has caused irreparable damage to our economic security, jeopardised our food safety and threatened our survival. A realistic comparison of the current data of our natural resources like forests, agriculture, livestock and water with their data at the time of partition of the sub-continent gives us a mind-numbing picture of how ruthlessly we have destroyed our country's natural assets. Lack of vision and commitment on the part of various governments, poor planning and adhocism in provincial and national administrative systems, lack of comprehensive policies, the backwardness of the general masses and vested interests of the business persons and feudal lords have caused our country to suffer great economic crises which could have been averted had we managed our natural resources in the right way. Pakistani people either squandered their natural resources mindlessly or exploited them at the wrong time or used them in the wrong way. Hence, it is a bitter reality that Pakistan is very rich in natural resources but very poor in their management.

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