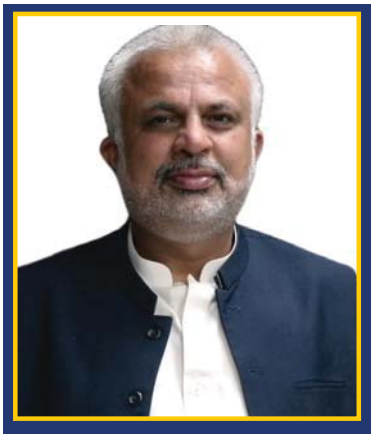
Reimagining Pakistan's Future: Economic Renewal along with Climate Resilience



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Pakistan today faces profound challenges of national identity and sovereignty. Since independence, successive governments have sought economic and strategic support from external powers, initially Washington and Moscow, later Beijing, and during and after the Afghan War, Riyadh, thereby undermining national sovereignty. These structural vulnerabilities have been further aggravated by climate pressures. Development economists across ideological traditions concur that unequal global development functions as a mechanism of influence across the Global South, perpetuating dependency and constraining sovereign policy choices.

Every nation has its own fundamental dynamics, trivialities and Achilles' heel. However, it is fundamentally shaped by the availability and effective integration of material resources, labor, capital, management capacity, technological capability, entrepreneurship, and natural resources.

At the time of independence, Pakistan was a fundamentally agrarian economy. Over time, the economy shifted toward a services-led economy. The current economy comprises about 23.5% agriculture, 17.7% industry, and 58.4% services. However, this transition occurred without deep industrialization and productivity growth. It created a structural disconnect in the economy.

Now, bringing coherence to economic resources requires a new vision. A vision that can rationalize the strategic instincts of the soldier, the entrepreneurial capacity of the businessperson, and the ecological wisdom long practiced by local communities. A new egalitarian society with foundations in indigenous resources and self-reliance, strengthening regional cooperation, and advancing climate strategies rooted in local priorities, equity, and the devolution of powers to local administration.

Although the Intergovernmental Panel on Climate Change (IPCC) was established by the UN in 1988 to assess climate science and advise governments, it was the UN Earth Summit (Rio) in 1992 and the creation of the UN Framework Convention on Climate Change (UNFCCC), when the slogans of climate change reached mass audiences. The global response to global climate change started evolving. The global focus shifted toward investment in renewable energy, cleaner production processes, sustainable finance, and environmental, social, and governance (ESG) aligned governance models.

In the early 2000s, Pakistan began to formally acknowledge climate change as a national policy concern. The country appeared among the world's most climate vulnerable countries despite contributing less than 1% of global greenhouse gas emissions. Pakistan's response to the IPCC and global climate governance was first institutionalized through the National Climate Change Policy in 2012, focused on (i) Adaptation (disaster risk reduction, agriculture, water), (ii) Mitigation (renewables, energy efficiency), and (iii) Capacity building. Pakistan submitted its Nationally Determined Contributions (NDCs) following IPCC guidance. The 2021 Updated NDC set a target of 50% reduction from projected emissions by 2030, conditional upon (i) ~15% from domestic resources and (ii) ~35% dependent on international climate finance. The country also pledged to shift to 60% renewable energy, 30% electric vehicles, and to ban new coal fired power imports (with limited domestic coal exceptions).

However, grassroots society's response to climate vulnerability requires a deep understanding of the country's historical development, industrial trajectory, alongside a clear appreciation of its present demographic, social, cultural, and economic structures. Only with such ground realities, Pakistan can undertake a realistic assessment of current challenges and articulate a vision that integrates climate adaptation with economic renewal, guided by the principles of ecological harmony that have sustained indigenous communities for centuries.

Pakistan's Industrial Development Since Independence

At the time of independence in 1947, Pakistan was an agrarian economy with a limited industrial base. The financial institutions of the country were yet to become fully independent. On 1 July 1948, Quaid-e-Azam Muhammad Ali Jinnah inaugurated the State Bank of Pakistan with a drive for the country's financial sovereignty. In his speech, he urged that Pakistan's banking and economic systems be shaped by its own social and economic realities rather than following foreign models.

Another significant development was the establishment of the Pakistan Industrial Development Corporation (PIDC) in 1952. PIDC played a pivotal role in the creation of enterprises in textiles, cement, fertilizers, paper, and engineering, sectors that later acted as the backbone of Pakistan's early manufacturing growth. The late 1950s and 1960s witnessed strong industrial expansion supported by export incentives, industrial estates, and growing agro-processing capacity. Partition, as well as the migration to and from the country, created opportunities which were captured by a few, and gains were uneven. Industrial ownership remained concentrated among a few families.

In the 1960s, the agrarian reforms were centered primarily on land redistribution, while largely neglecting equitable water rights and improved rural credit systems. These reforms were incomplete and politically compromised. Pakistan's powerful civil-military bureaucracy inherited British colonial administrative structures. Instead of restructuring them for broad-based development, the ruling elite aligned with Western strategic interests.

The country's economic models prioritized profit, state power, and geopolitical alignment. Indigenous peoples, local customs, and principles of living in balance with nature were overlooked. In fact, the country missed principles centered on stewardship, restraint, and ecological reciprocity that might have supported more sustainable rural development, water governance, and social equity.

In 1970s the economy was nationalized and agrarian reforms aligned with global development idealism. Zulfikar Ali Bhutto moved swiftly to implement reforms, partly as a popularity measure, responding to a nation that was eagerly expecting change. The fall of Dhaka provided the necessary space for him to implement the reforms without surface resistance. Crucially, politically experienced comrades capable of overseeing the reforms' faithful implementation were missing at that moment. Zulfaqar Ali Bhutto had neither the time nor the opportunity to cultivate such a cadre within his political or bureaucratic ranks. In fact, he was encircled by opportunists and self-styled intellectuals.

As a result, the implementation mechanism was in the hands of the elite-controlled bureaucracy. The bureaucracy was naturally dissatisfied with the reforms, and they were aware of the weaknesses of the system and capitalized on them at a critical moment, especially when the vulnerabilities of Zulfaqar Ali Bhutto and his inner circle became fully exposed. Industrial productivity declined. The entire reform agenda ultimately collapsed with the fall of Zulfaqar Ali Bhutto and was replaced by a wave of radical Islamization.

After a decade of Islamization and the Afghan war, the country's economy was infused with dollars, not through national economic effort, but largely due to Pakistan's strategic alignment with the United States and Saudi Arabia. During the same period, foreign exchange was superficially maintained as stable. Society became contaminated by forces of externally implanted radicalization, narcotics, and militarization, which distorted its moral fabric and social conscience.

Subsequent governments in the 1990s emphasized privatization and deregulation as reactionary policies, as the country faced deep economic crises of growing foreign debt, limited fiscal space, low literacy rates, unemployment, and poverty. These challenges were compounded by high population growth and energy crises. These reactionary policies lacked foundational support from parallel investments in technology, research, or human capital. In fact, the fiscal gap was not available to successful governments in the 1990s for such reforms.

The industrial structure remained narrow and vulnerable to shocks. After the wrap-up of the Afghan war, the US was not happy with Pakistan's pursuit of the nuclear program. Through the Pressler Amendment, the US cut its aid to Pakistan, and the economy's vulnerability was once again exposed to foreign powers. Energy shortages, exchange rate pressures, and climate-related disruptions further intensified these vulnerabilities. The economy possessed limited depth, and the masses were still outside the structural economy, and their indigenous knowledge was relegated to the status of being outdated or unfashionable. Rivalry with India, involvement in the Afghan conflict, and Iran's strained relationship with the United States, combined with continual strategic preoccupations, prevented Pakistan from pursuing meaningful regional cooperation.

After 9/11 in 2001, Pakistan once again aligned itself with the United States. The country witnessed a second surge of external financing into the economy. Once again, the inflow was not the outcome of domestic economic performance, but rather a consequence of Pakistan's renewed strategic partnership with the United States. The economic takeaway was straightforward: as a nation, we must limit foreign dollar injections that are not rooted in real economic productivity.

Current Economic Performance

Pakistan's economic landscape reflects persistent structural issues, stagnation, limited public participation in economic governance, and weak integration of ecological concerns. Nearly eight decades after gaining independence from British rule in 1947, the country continues to be ruled by elites with little commitment to collective welfare. It ranks low on the Human Development Index (0.544; 168th) and high on the Climate Risk Index 2026 (15th). Pakistan's major cities routinely appear among the world's most polluted in IQAir rankings, and the nation remains among the small group of countries where polio has yet to be eradicated.

According to the Economic Survey of Pakistan 2024–25, the GDP, valued at current market prices, reached Rs 114,692 billion (USD 411 billion) and is ranked among the top ~40, 45 economies globally. The country is ranked 5th most populous country, and its share of the world population is about 3.1%, however Pakistan's share of global GDP remains small, roughly 0.9% of total world output as of 2025.

The low per-capita income and economic vulnerabilities highlight the urgent need for equitable, inclusive, and resilience focused development to translate into broad-based prosperity or sustainable development.

However, the country continues to depend substantially on external financial support, through bilateral assistance from the United States, China, and GCC partners, and repeated stabilization programs with the IMF and other lenders, reflecting deeper structural challenges in achieving economic self-reliance.

Global Lessons for Pakistan's Development Path

Developing economies have been brought into being by resource abundance and the potential for high returns, which influences their economic growth. However, mismanagement and high abundance of natural resource rents can damage the global environment. In G7 countries, economic growth and total natural resource rents have enhanced carbon dioxide emissions and degraded the environment in the long run.

The People's Republic of China, established in 1949, initially followed the Centralized Socialism model, where the state owns industry and agriculture and regulates prices and production quotas. During this period, basic literacy and health improved. Reforms in the seventies witnessed a transformation toward a "socialist market economy" where state control coexisted with market dynamics. China's entry into the WTO in 2001 deepened integration with global commerce, which was followed by technological upgrades after 2010, witnessing high-tech manufacturing and an era of AI, robotics, semiconductors, and green technologies (EVs, batteries, solar). China has become a global leader in electronics, electric vehicles, and solar technologies, dominating critical metals processing and battery and solar panel manufacturing. China's trajectory highlights the need for coherent long-term industrial strategies aligned with global technological shifts.

India's early commitment to technological and scientific capacity, exemplified by the IITs, research councils, and public research labs, supported later growth in pharmaceuticals, IT, and renewable technologies. India started in 1951 to build its scientific and technological capacity; there are now 23 IITs across India. Pakistan can draw from this experience by strengthening existing professional universities and research institutes with financial and administrative autonomy. Leadership responsibility should be entrusted to capable leaders to strengthen the foundation for a knowledge-based economy.

Singapore demonstrates governance based on the people's trust. Despite limited natural resources, the country provides an example of transparent governance, efficient logistics, institutional reliability, and world class academic institutions. Its world-class ports, communication networks, and governance attract high-tech manufacturing and global finance.

Pakistan is required to objectively select the most relevant elements of developing economies in its development framework, supported by improving civil liberties, transparency, investment in strengthening educational and research institutions, regulatory frameworks, and labor standards. A new paradigm should respect community sensitivities and local contexts. It should be framed around its own social and ecological realities.

National wealth is indigenous knowledge and a deep understanding of natural resources, particularly in sustainable land use and water stewardship, which provides a value driven foundation on which such a framework can be built. Minerals are the passive gifts of the Earth. Control over minerals indeed controls industrial production, and at the same time represents an ethical test of how societies reconcile development with stewardship.

From Vulnerability to Resilience

The recent studies published in renowned journals that includes Nature *Partner Journal-Natural Hazards*[1], *Nature Partner Journal- Climate and Atmospheric Science*[2], and *Earth's Future*[3] confirm that extreme rainfall and atmospheric river systems of Pakistan are becoming increasingly intense. Climate change is profoundly affecting the national economy and testing the resilience of the country. A test the country has repeatedly failed over the past eight decades. he 2022 floods showed how extreme climate events can reverse years of mismatched development within weeks, development that challenges natural ecology.

Now, it is time for the nation to learn lessons from history. A diversified, technologically upgraded economy supported by indigenous resources and an industrial base is essential for social, economic, and environmental resilience. Strengthening domestic production reduces exposure to external volatility. Communities rooted in ecological balance have demonstrated adaptive capacities that modern institutions often seek to replicate.

Rural Power Dynamics and the Need for Integrated Reform

Agriculture still remains the backbone of Pakistan's economy, contributing 23% of GDP and employing nearly 40% of the workforce, according to the Economic Survey of Pakistan 2024–25. It supports rural livelihoods, supplies raw materials to major industries including textiles, sugar, and leather, and underpins food security, export earnings, and poverty reduction. However, the sector continues to face major challenges, including water scarcity, climate vulnerability, aging irrigation infrastructure, fragmented landholdings, weak extension services, and limited access to formal credit.

In the past, land reforms failed to deliver meaningful transformation because they were unable to address the broader rural power structure.

1. Shah M, Ali R, Hussain S. Hydroclimatic drivers of Pakistan's 2022 megaflood. *npj Natural Hazards. 2025.*
2. Ahmed F, Siddiqui T, Nawaz A. Anthropogenic and regional drivers of extreme monsoon rainfall in Pakistan. *npj Climate and Atmospheric Science. 2024.*
3. Khan S, Aslam M, Lin Y. Atmospheric river dynamics during Pakistan's 2022 floods. *Earth's Future. 2024*

Even where redistribution occurred on paper, real authority remained concentrated among large landholders, who continued to control irrigation systems, rural credit, agricultural inputs, and the informal justice mechanisms that shape local dispute resolution. As a result, the rural masses remain excluded from the economic cycle.

The effective transformation of Pakistan's rural economy requires an integrated agrarian reform, which should include, but not be limited to, transparent water distribution, accessible rural credit, strengthened local justice systems, digitalized land records, equitable and efficient irrigation systems, and accountable local governance supported by climate-resilient infrastructure. In addition, efficient market-access mechanisms would play a critical role in restoring farmers' trust in the national economy and improving the performance of agrarian markets.

These institutional reforms are essential for enabling small farmers to adopt improved technologies and participate more effectively in value chains linked to agro-industry. This approach is consistent with indigenous customs and knowledge systems that regard land and water as shared resources to be managed through collective stewardship rather than individual exploitation. Integrating such wisdom into contemporary policy design can help Pakistan build a rural economy that is productive, equitable, and climate resilient. Without structural reforms, however, rural inequality will continue to impede national economic goals and weaken the country's ability to respond effectively to climate change.

Knowledge based economy

Pakistan is a country of youth, with 60% to 64% of the population under the age of 30, which provides the fundamental ingredient necessary to drive a knowledge-based economy. However, the transformation into a knowledge-led economy requires reforming the whole education system, starting from primary education. A knowledge-based economy is one in which intellectual capital—education, skills, innovation, and technological capability—constitutes the principal driver of economic growth and competitiveness.

The core impetus for the knowledge-based economy is already in place. In 2024, Pakistan received approximately USD 34.6 billion in remittances. Pakistan now ranks among the world's leading suppliers of freelance digital labor through platforms such as Fiverr and Upwork. Crucially, these earnings required no forests to be cleared, no aquifers to be poisoned, and no workers to be buried underground, underscoring that Pakistan's greatest wealth lies in the skills, creativity, and productivity of its people. It is knowledge that shapes the effective integration of material resources, labor, capital, management capacity, technological capability, entrepreneurship, and natural resources into an ecologically sustainable economy.

The global development experience also demonstrates the importance of integrating technical and vocational education and training (TVET) with university-level education to build a diversified, skilled workforce for further strengthening the knowledge-led economy. The model creates both mid-level technicians and high-end scientific and engineering talent, an approach that Pakistan can adopt to strengthen its own transition toward a knowledge-based economy. Such an approach is anticipated to provide much-needed space to export skilled workforce and professionals to developed economies. Such development in the long term shall help the country in capacity building as well.

Governance for Ease

In the World Bank "Doing Business Report" published in 2020, Pakistan was ranked 108th out of 190 economies, suggesting that a lot of efforts are required to overcome structural bottlenecks to improve ease of doing business. The reforms include automation and digitization of the economy and modernization of transport and communication infrastructure. In essence, the country needs a comprehensive transformation of governance to restore public trust. In rural regions, empowering local communities to govern themselves is essential for ensuring responsiveness, accountability, and sustainable progress. Singapore and East Asian economies provide lessons in framing policies and building institutions based on public trust.

Conclusion

Pakistan is blessed with abundant natural resources to strengthen and diversify its economy. Our industrialists, entrepreneurs, and farmers possess the knowledge, technology, and skills of the modern age. However, the state has failed to rationally integrate material resources, labor, capital, management capacity, technological capability, entrepreneurship, and natural resources to build a nation. At its core, the state has failed to integrate the public masses into the economy as valued productive agents, leaving growth disconnected from broad-based social participation.

The paradigm shift from a conventional economy to a knowledge-based economy not only requires a deep understanding of economic resources but also the local customs and ecological wisdom practiced by local communities along with their sensitivities. Public trust in governance is the initial litmus test to judge the true health, strength, or performance of an economy. A sovereign economy of the nation unifies strategic defense, economic creativity, and ecological stewardship to pursue a development path based on capability rather than vulnerability, and builds the confidence of people who know how to protect both their land and their destiny.

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