**Goal 9 Industry, Innovation, and Infrastructure** 

# INDUSTRY, INNOVATION **AND INFRASTRUCTURE**

# **Country Context**

Islamic Republic of Pakistan, the fifth largest population on the planet with 213.6 million people, is a sovereign state situated in a geo-strategic location at the junction of middle East and central Asia. Bereft of Quaid's dream for a welfare state, social development has been off the mark with 22.4 million Out of School Children, 56.3% Out of Pocket Expenditure in health, and 29.5% population living below poverty line. Exclusionist policy patterns marginalizing governance has led to country ranking at 147th out of 188 in Human Development Index and 143rd out of 144th in Global Gender Gap Index. Moreover, marginalization of key strategic sectors has led to funding diversions away from social development, barely allocating 3% of the GDP each for Education, Health and Social protection.

With a GDP of \$279 billion (2017 est.),<sup>8</sup> Pakistan is categorized as a lower middle-income country. Economic stability has been a constant uphill battle with public debts and liabilities escalating up to 74% of GDP.<sup>9</sup> The country is ranked at 171 out of 188 countries in terms of GDP per capita (PPP) of \$5,400 (2017 est.)<sup>10</sup> while unemployment stands at 6% without factoring in statistics from informal economy which employs almost 70% of the country's workforce.<sup>11</sup> Gini index estimates 30.7% inequality with disparities as wide as the income share held by the lowest 10% at 4% against that of the top 10% at 26% (2013 est.)<sup>12</sup> in Pakistan.

In hindsight, political institutions in their formative years - mainly adapted from the colonial rump - were barely able to withstand extraconstitutional maneuvers<sup>13</sup> in the absence of a strong nation-building consciousness. This resulted in successive instability of civilian governments followed by political proxies and status-quo representatives, beguiling under democratic pretexts. Weak democratic structures led to the absentia of populace from democratic processes and crippled country prospects in socio-economic and political spheres with implications long into its future. This is evident of the country rankings at 110<sup>th</sup> in Democracy Index<sup>14</sup> and 20<sup>th</sup> among Failed States rankings in 2018.<sup>15</sup> Fret over it not though, for Quaid's optimism guides our course:

The story of Pakistan, its struggle and its achievement, is the very story of great human ideals, struggling to survive in the face of great odds and difficulties.<sup>1</sup>

Amid international isolationism, national calamities and social fragmentation, democratization of state and social institutions is the moral and political imperative. It is essential that we promote critical education and discourse to bring forth analysis that helps adequately influence policy mandates for a just, peaceful and prosperous Pakistan.

M.A. Jinnah, Address to the people in Chittagong, March 23, 1948

### **Industrial Sector**

Pakistan has a versatile industrial sector comprised of textile, sugar, telecom, automobile, sports, tourism, cement, fertilizer and leather industries, among others. Yet, our industry is on a constant decline dropping from a growth rate of 6.8% in 2016 to 6.1% in 2017 mainly attributed to various structural bottlenecks in sectoral governance. Constituting a little over one fifth of the GDP, the sector has undergone a downward stride, especially in textile exports which accounted for almost 59% of the total exports in 2015.16 A host of factors have contributed to such decline including incoherent industrial policies, inadequate investments, inefficient industrial research and development, insufficient technical skills, corruption and law & order.<sup>17</sup> In the absence of a consistent industrial growth strategy, most of the financing for the sector has focused on haphazard infrastructural upgradation focusing very little on developing human capital matching international standards.<sup>18</sup> Moreover, absence of an effective regulatory mechanism for private sector, protected by liberalization and deregularization conditions imbedded across trade agreements, has also adversely affected small industries and labor class alike. Despite Pakistan's preferential access to EU markets through GSP+ deal, reaping over a billion dollars in benefits in 2015 alone, distribution of profits to the lowest tier hasn't translated into substantive upgradation in production infrastructure or raise in the standard of living for the labor class. This should leverage Pakistan's prospects against Goal 9.

- 1. Informed coherent policies, equitable financing and quality enhancement should be directed to improve industrial governance.
- 2. Technical and technological standard should be upgraded for shifting the focus from production of raw material to finished good, especially for the international market.
- 3. Creation of new wealth through installment and upgradation of industrial facilities, investment in production infrastructure, and rejuvenation of indigenous enterprise should be prioritized.
- 4. Conducive business environment should be ensured for Small and Medium Size Enterprises (SMEs) through marketing, credits and technical support.
- 5. Local handicrafts need to be promoted by linking the artisans with the market directly to ensure maximum share of profits for the laborers.
- 6. Labor rights should be prioritized as the foremost obligation to ensure registered jobs and benefits, minimum wages, social protection schemes and safe working conditions.
- 7. Pro-labor policy action, backed by serious political will, should be mobilized to protect the rights of labor in the informal economy, home-based workers and bonded labor.
- 8. Regulatory mechanisms and institutions should be strengthened ensuring industrial compliance with labor and environmental standards, as per country commitments against international frameworks like ILO conventions.

## **Services Sector**

Services sector has shined as the most significant and reliant sector for Pakistan's growth recording a GDP share of 59% in 2016<sup>19</sup> with an expected growth rate of 5.6% in 2017.<sup>20</sup> However, reckoning our demographic profile there is a lot to be done to secure a life of dignity for our future generations. This requires transformative focus on quality educational outcomes both in general and technical education to sustain and further leverage growth prospects. Vision 2025's aspirations of developing the country into a knowledge-economy can only be realized if the outlined reforms in curriculum, pedagogy, technology, assessment and overall governance of educational landscape are enacted in spirit.<sup>21</sup> The ambitions of investing in skill development, innovation and technology need to be translated into consistent financing for producing skilled and qualified workforce capable of competing in the international market. Our training institutes ought to serve as efficient nurseries in that regard where regulatory bodies like NAVTTC play an instrumental role in enhancing qualitative learning outcomes. Besides, provincial TEVTAs need to play an active role in enhancing academia-industrial linkages for job placements, market surveys to enact relevant traits, and, enhanced R&D to keep abreast of the fast-changing technical education dynamic with the emergence of CPEC projects. This needs to be clubbed with creation of more jobs within and facilitation for placements outside the country to get the decisive advantage on our competitors through our increasing youth bulge reaching 63% of the population.

- 1. Our vision of economic growth needs to identify and dovetail synergetic ties across sectors to ensure uniform growth strategy across sectors.
- 2. Educational infrastructure needs to be enhanced focused on qualitative gains in skill upgradation.
- 3. Academia-industrial linkages and sharing of strategic expertise should be institutionalized to pace up with market demands.
- 4. Institutionalization and upgradation of new skills should be strategized to smoothly adapt to rampant shifts in the tech-savvy market.
- 5. Research and Development should focus on innovation and a robust marketing strategy to showcase significant interventions and outcomes.
- 6. Entrepreneurship schemes need to be improved for training and business opportunities for talented youngsters.
- 7. Dignity must be placed ahead of profitability; labor standards should rise hand in hand with employability prospects to ensure the life of dignity for laborers, especially in the informal sector.
- 8. The issues of Child and Bonded labor need to be addressed through effective regulatory measures to ensure compliance with international labor standards and normative frameworks.

### References

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- <sup>3</sup> Government of Pakistan. (2017). *Pakistan Economic Survey* 2017/18. Ministry of Finance. Retrieved August 21, 2018, from <a href="http://www.finance.gov.pk/survey/chapters">http://www.finance.gov.pk/survey/chapters</a> 17/10-Education.pdf
- <sup>4</sup> United States Government. (n.d.). *The World Fact Book*. Central Intelligence Agency. Retrieved August 19, 2018, from <a href="https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html">https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html</a>
- <sup>5</sup> UNDP. (2016). *Human Development Report 2016*. Retrieved September 07, 2018, from <a href="http://hdr.undp.org/sites/default/files/2016">http://hdr.undp.org/sites/default/files/2016</a> human development report.pdf
- <sup>6</sup> World Economic Forum. (2017). *The Global Human Capital Report* 2017. Retrieved September 07, 2018, from https://weforum.ent.box.com/s/dari4dktg4jt2g9xo2o5pksjpatvawdb
- <sup>7</sup> Government of Pakistan. (2017). *Budget 2017/18*. Ministry of Finance. Retrieved September 11, 2018, from <a href="http://www.finance.gov.pk/budget/Budget%20in%20Brief%202017-18.pdf">http://www.finance.gov.pk/budget/Budget%20in%20Brief%202017-18.pdf</a>
- <sup>8</sup> World Bank. (2018). *World Bank Data/Pakistan*. Retrieved September 17, 2018, from <a href="https://data.worldbank.org/country/pakistan">https://data.worldbank.org/country/pakistan</a>
- <sup>9</sup> Government of Pakistan. (2018). *Pakistan's Debt and Liabilities Summary*. State Bank of Pakistan. Retrieved September 14, 2018, from <a href="http://www.sbp.org.pk/ecodata/Summary.pdf">http://www.sbp.org.pk/ecodata/Summary.pdf</a>
- <sup>10</sup> United States Government. (n.d.). *The World Fact Book*. Central Intelligence Agency. Retrieved September 11, 2018, from <a href="https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html">https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html</a>
- <sup>11</sup> United States Government. (n.d.). *The World Fact Book/Pakistan*. Central Intelligence Agency. Retrieved August 20, 2018, from <a href="https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html">https://www.cia.gov/library/publications/the-world-factbook/geos/pk.html</a>
- <sup>12</sup> World Data Atlas. (2018). *GINI Index/Pakistan*. Knoema Corporations. Retrieved September 13, 2018, from <a href="https://knoema.com/atlas/Pakistan/topics/Poverty/Income-Inequality/GINI-index">https://knoema.com/atlas/Pakistan/topics/Poverty/Income-Inequality/GINI-index</a>
- <sup>13</sup> Tudor, M. (2015). *Pakistan's Security State of Mind*. Cambridge Journals/Perspectives on Politics, 13(04), 1097-1102. Retrieved September 04, 2018, from <a href="https://www.cambridge.org/core/journals/perspectives-on-politics/article/pakistans-security-state-of-mind/71A9A5FFA5B65766110425AE774E9502">https://www.cambridge.org/core/journals/perspectives-on-politics/article/pakistans-security-state-of-mind/71A9A5FFA5B65766110425AE774E9502</a>

<sup>&</sup>lt;sup>1</sup> Government of Pakistan. (2017). *Provisional Summary Results of 6th Population and Housing Census* – 2017. Pakistan Bureau of Statistics. Retrieved August 23, 2018, from <a href="http://www.pbs.gov.pk/content/provisional-summary-results-6th-population-and-housing-census-2017-0">http://www.pbs.gov.pk/content/provisional-summary-results-6th-population-and-housing-census-2017-0</a>

<sup>&</sup>lt;sup>2</sup> Government of Pakistan. (2015). *Pakistan Education Statistics*. National Education Management Information Systems. Retrieved September 11, 2018, from <a href="http://library.aepam.edu.pk/Books/Pakistan%20Education%20Statistics%202015-16.pdf">http://library.aepam.edu.pk/Books/Pakistan%20Education%20Statistics%202015-16.pdf</a>

<sup>14</sup> The Economist Intelligence Unit. (2017). *Democracy Index*. Retrieved August 21, 2018, from <a href="http://pages.eiu.com/rs/753-RIO-">http://pages.eiu.com/rs/753-RIO-</a>

438/images/Democracy Index 2017.pdf?mkt tok=eyJpIjoiWkRKbU1HWmxNVEUwTW1FdyIsInQiOiJPd lltVFV0blFRQzZNVERCZHhVeitZRElmUGplOHh3NWs1d2wzVzdRS1JvNU1kVmUxQVRESU9LbEVSO VwvR1F4aG1PV1NlS0ZZcng4NzBcLzVNZ09JOUxiZU5TTEVPekVHayttOTRqQkQ

- <sup>15</sup> Fund For Peace. (2018). *Fragile States Index*. Retrieved September 07, 2018, from <a href="http://fundforpeace.org/fsi/data/">http://fundforpeace.org/fsi/data/</a>
- <sup>16</sup> World Bank. (2017). *Pakistan Development Update*. Retrieved September 04, 2018, from <a href="http://documents.worldbank.org/curated/en/536431495225444544/pdf/115187-WP-PUBLIC-P161410-77p-Pakistan-Development-Update-Spring-2017.pdf">http://documents.worldbank.org/curated/en/536431495225444544/pdf/115187-WP-PUBLIC-P161410-77p-Pakistan-Development-Update-Spring-2017.pdf</a>
- <sup>17</sup> Khalid, U. (n.d.). *Industrial Growth Of Pakistan*. Retrieved September 05, 2018, from <a href="https://www.slideshare.net/UsmanKhalil9/industrial-growth-of-pakistan">https://www.slideshare.net/UsmanKhalil9/industrial-growth-of-pakistan</a>
- <sup>18</sup> Rabbi, A., & Mamoon, D. (n.d.). *Short Term versus Long Term Economic Planning in Pakistan: The Dilemma.* University of Management and Technology, Munich. Retrieved August 23, 2018, from <a href="https://mpra.ub.uni-muenchen.de/76114/1/MPRA">https://mpra.ub.uni-muenchen.de/76114/1/MPRA</a> paper 76114.pdf
- <sup>19</sup> Government of Pakistan. (2015). *Pakistan Economic Survey 2015/16*. Ministry of Finance. Retrieved August 29, 2018, from <a href="http://www.finance.gov.pk/survey">http://www.finance.gov.pk/survey</a> 1516.html
- <sup>20</sup> World Bank. (2017). *Pakistan Development Update*. Retrieved September 04, 2018, from <a href="http://documents.worldbank.org/curated/en/536431495225444544/pdf/115187-WP-PUBLIC-P161410-77p-Pakistan-Development-Update-Spring-2017.pdf">http://documents.worldbank.org/curated/en/536431495225444544/pdf/115187-WP-PUBLIC-P161410-77p-Pakistan-Development-Update-Spring-2017.pdf</a>
- <sup>21</sup> Government of Pakistan. (2014). *Pakistan Vision* 2025. Ministry of Planning, Development & Reform, Planning Commission. Retrieved September 11, 2018, from <a href="https://fics.seecs.edu.pk/Vision/Vision-2025/Pakistan-Vision-2025.pdf">https://fics.seecs.edu.pk/Vision/Vision-2025/Pakistan-Vision-2025.pdf</a>