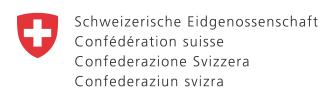
DEVELOPMENT ADVOCATE DAY Of the 2 street of th



DEVELOPMENT ADVOCATE PAKISTAN



Swiss Agency for Development and Cooperation SDC





Development Advocate Pakistan provides a platform for the exchange of ideas on key development issues and challenges in Pakistan. Focusing on a specific development theme in each edition, this quarterly publication fosters public discourse and presents varying perspectives from civil society, academia, government and development partners. The publication makes an explicit effort to include the voices of women and youth in the ongoing discourse. A combination of analysis and public opinion articles promote and inform debate on development ideas while presenting up-to-date information.

Editorial Board

Mr. Ignacio Artaza

Country Director, UNDP Pakistan

Mr. Hamid Raza Afridi

Policy Advisor Embassy of Switzerland

Mr. Shakeel Ahmad

Assistant Country Director/Chief
Development Policy Unit, UNDP Pakistan

Mr. Aadil Mansoor

Assistant Country Director/Chief Crisis Prevention and Recovery Unit, UNDP Pakistan

Mr. Kaiser Ishaque

Assistant Country Director/Chief
Democratic Governance Unit, UNDP Pakistan

Mr. Amanullah Khan

Assistant Country Director/Chief Environment and Climate Change Unit, UNDP

Ms. Fatimah Inayet

Communications Analyst, UNDP Pakistan

DEVELOPMENT ADVOCATE PAKISTAN

Disclaimer

The views expressed here by external contributors or the members of the editorial board do not necessarily reflect the official views of the organizations they work for and that of UNDP's.

Editorial Team

Maheen Hassan Umer Akhlaq Malik

Design

Hasnat Ahmed

Printed by:

Al-Noor Printers, Islamabad

United Nations Development Programme Pakistan 4th Floor, Serena Business Complex, Khayaban-e-Suharwardy, Sector G-5/1, P. O. Box 1051, Islamabad, Pakistan

For contributions and feedback, please write to us at: pak.communications@undp.org

ISBN: 978-969-8736-22-7

March 2018

CONTENTS

Analysis

02 Drivers of Inclusive Growth in Pakistan

Dr. Abdul Saboor Et al. and Danish Khan

Opinion

12 Economic Corridor Development and Multidimensional Poverty in Pakistan

Guntur Sugiyarto & Dewan Mushtaq

14 Entrepreneurship, Technology and Innovation: The State as an Agent of Change

Dr. Shaukat Hameed Khan

Agriculture and the Role of Rural Economy for Inclusive Growth

Nuzhat Ahmad

20 Industrial Policy:
Challenges and an Opportunity to
Promote Inclusive Growth

Shahid Javed Burki

26 Nadeem Javaid

Former Chief Economist
Ministry of Planning, Development and Reform

72 Tahira Raza

Former President First Women Bank

Youth Voices

29 Faridun Gogal

Diyar Khan

Imran Khan

Aghala Asfand

Hiba Qazi

Haider Shahzad

Salman Arif

Saima Yousaf

Roushen Sabzal

Haybat Ullah

Obeida Saniha

Jaffar Jahangir

Safia Sanaullah

Aleena Tagee

Maaman Qadir

Khyreed Zabeeh

Interviews

23 Dr. Shahbaz Khan

Managing Director Khyber Pakhtunkhwa Information Technology Board (KPITB)

25 Shandana Humayun Khan

Chief Executive Officer Rural Support Programmes Network (RSPN)





/undppakistan



www.twitter.com/undp_pakistan



www.pk.undp.org



Editorial

Inclusive Growth and Human Development

The Pakistan National Human Development Report 2017 points towards large disparities in human development across districts and cities of Pakistan. The Human Development Index (HDI) of 0.877 for Lahore is on average equal to that for France and Spain. It is higher than the average HDI for Saudi Arabia, United Arab Emirates and many other countries. Lahore and five other cities of Pakistan fall in the Very High Development Category.

On the contrary, 14 districts of Pakistan, mostly in Balochistan, are worse than the poorest countries such as Nigeria, South Sudan and others in terms of their HDI values. Similarly, according to the Pakistan National Human Development Report, the HDI for women is 25 percent lower than for men. Women labor force participation of 24.9 percent is the lowest when compared to India, Bangladesh and Sri Lanka. Factoring inequality in human development across regions and using gender as a measure, shows that growth in Pakistan has been less inclusive.

There are however huge opportunities for inclusive growth in the country. The burgeoning youth population, if provided skills and capacities, will not only drive growth, but their participation will also make it more inclusive for two reasons. First, they constitute the largest population segment. Second, like women, they have not fully benefited from the growth process thus far. Youth unemployment is higher than the overall unemployment rate in the country.

Innovation in technology and other sectors is creating new avenues for growth and livelihoods. Federal and provincial governments have set up funding windows and incubation facilities to promote innovation and entrepreneurship. Some of the startups by young entrepreneurs have generated promising results. Technological innovation if sustained and expanded, can play an important role in inclusive growth. They will contribute to diversification of the economy and in creating a knowledge-driven services sector.

The China Pakistan Economic Corridor (CPEC) offers another opportunity for inclusive growth. CPEC projects will undoubtedly help overcome some of the structural bottlenecks to growth in energy and infrastructure sectors. However, CPEC will have a higher balancing impact if it properly integrates inclusion and sustainability concerns.

For inclusion, CPEC should make special efforts to connect the poorest regions / districts to markets. Projects which generate higher social impact should be prioritized under CPEC. Supplementary projects such as skills development, infrastructure connecting poor regions to the main CPEC route, special initiatives to promote women participation in economic activities etc, would make CPEC more inclusive and participatory.

Besides its economic impact, CPEC's benefits should also be evaluated and measured using sustainability indicators. We know that a large segment of the population, around 60 percent, still rely on agriculture directly or indirectly. Climate change directly impacts agriculture and with it, the lives of around 40 percent of the labor force who are employed in the agriculture sector. Pakistan is the seventh most vulnerable country to climate change effects. CPEC projects should therefore fully embed environment and climate change concerns to make the growth process both inclusive and sustainable.

Recent research concludes that inequality constraints long-term economic growth. It also suggests that higher the initial level of inequality, both income and non-income, the smaller the poverty reduction effect of per capita income growth. Economic growth which provides opportunities for the inclusion of all segments of society including poor, women, youth, minorities and other disadvantaged groups as stakeholders, tend to be sustainable in the long-term. In the context of Pakistan, engaging youth, addressing regional disparities and capitalizing CPEC are the key opportunities for inclusive growth.

It is encouraging to note that human development is high on the government agenda. Regions and districts within Pakistan which are low on human development are also the ones which are poor economically. Connecting them to markets and vitalizing economic growth in these regions will not only make the growth process inclusive, but will also accelerate the pace of human development.

Analysis

Drivers of Inclusive Growth in Pakistan

Note: Main Analysis has been written in collaboration with Dr. Abdul Saboor (Dean, Faculty of Social Sciences) and his team (Saira Saeed, Sidra Nazir, Hassan Shehzad, Imran Ahmed Rao, Khawar Hassan and Qasim Raza) at the PMAS Arid Agriculture University, Rawalpindi, and Danish Khan (Ph.D. candidate, Economics-University of Massachusetts).

Introduction

Pakistan is confronting the formidable challenge of economic growth, which is neither sustainable nor inclusive. This is in part due to the skewed pattern of resources, particularly land, and in part due to the lack of distributive public policies. Despite being the 26th largest economy in the world¹, Pakistan ranks at 147 on the Human Development Index (HDI).² This discrepancy in terms of Pakistan's size of economy and its performance on the HDI is revealing. Its performance on important social indicators is significantly below as compared to its income level. The HDI illustrates that contemporary economic development in Pakistan has left many behind and unless structural reforms are undertaken, existing socio-economic inequities would continue to persist.

Inclusive growth refers to an economic growth process that provides equality of opportunity both in employment and in access to essential services like education and health. It can be actualized by including the deprived masses through creating a level playing field and provision of equitable opportunities.

The inclusive growth paradigm stems from the philosophical narratives of Amartya Sen. His capabilities approach is about improving and enhancing the quality of life. Inclusive growth is thus a policy response to Sen's Capability and functionality ideas.

Sustainability is an important ingredient of inclusive growth. Any economic development which creates inequality would not last in the long run and thus renders the growth non-inclusive. The Asian Development Bank refers to inclusive growth as "Raising the pace of growth by increasing size, participating in it, by doing investment

to raise productivity."

The United Nations Development Programme (UNDP) defines inclusive growth as both an outcome and a process. It ensures that everyone can participate in the growth process and equitably share the benefits. Likewise, the Organization for Economic Co-operation and Development (OECD) defines it as, "...sharing of the income but also equal distribution of the income generating from economic growth."

There may be a variety of drivers for catalyzing the ongoing growth and ensuring that it is pro-poor. These drivers can be categorized into political, economical, social, cultural and geopolitical ones. These drivers should be incorporated into the strategic planning of the country's policies.

The structure of growth is a key determinant for the reduction of poverty; however,

inequality is not favorable to either economic growth or reducing poverty.³The goal of SDGs by 2030 is zero poverty.⁴ This goal will be extremely difficult to achieve owing to perpetuating income inequality.

Poverty, Growth and Inequality Nexus

Economic growth in Pakistan has been quite erratic and so has been its implications on poverty and inequality. Over the period of time, the services sector (from 38 percent in 1960 to 53.09 percent in 2017) has replaced agriculture (from 44 percent in 1960 to 22.88 percent in 2017) as the key driver of economic growth. Table 1 depicts the sector-wise trends of growth rate-the services sector takes the lead followed closely by industry, manufacturing and finally agriculture. High economic growth could be a sign of income inequality due to the fact that income has been stagnant in a few hands.

Table 1: Sector-wise Trends of Economic Growth Rate (%)

Year	GDP	Agriculture	Industry	Manufacturing	Services
1950	3.5	1.7	8.2	7.7	3.1
1960	6.8	5.1	10.9	9.9	6.7
1970	4.8	2.4	6.1	5.5	6.3
1980	6.5	5.4	7.6	8.2	6.7
1990	4.6	4.4	4.3	4.8	4.6
2006	5.4	2.2	7.4	9.3	5.9
1950-2006	5.2	3.7	7.3	7.4	4.9
2017	3.9	2.2	5.6	5.1	5.9

Source: Ishrat Hussain, "Pakistan's Growth Experience 1947-2007" and Economic Surveys, Government of Pakistan.

the skewed distribution of income not only slows down growth, but also has negative implications on poverty. High income

To some extent, this has implications on inequality, as a significant proportion of population in Pakistan resides in rural areas

^{1.} GDP adjusted to purchasing power parity but in nominal terms, Pakistan's economy is 40th largest in size.

^{2.} Human Development Index (HDI) can be used as an approximation to measure the overall wellbeing of a society as it measures income per capita, education and health outcomes

Abdul Saboor and Zakir Hussain (2005), "The Dynamics of Rural Poverty in Pakistan: A Time Series Analysis." Available at http://www.lahoreschoolofeconomics.edu.pk/EconomicsJournal/Journals/Volume%2010/Issue%201/Saboor.pdf

^{4.} Sustainable Development Knowledge Platform. For further information, please visit https://sustainabledevelopment.un.org/sdgs

Table 2: Distribution by share of households, area, share-cropped, and poor households

Size of farm (acres)	Distribution of Rural households (%)	Distribution of poverty (%)	Distribution of operator households (%)	Distribution of operator acres (%)	Distribution of sharecropper households (%)	Poor sharecropper households to total sharecropper households (%)	Poor non- sharecropper households to total non-sharecropper households (%)
Landless	65	72					
More than zero but less than 3	13	13	39	8	17	51	42
3 to less than 5	7	5	19	11	18	62	32
5 to under 12.5	11	8	31	36	53	52	27
12.5 to under 25	3	1	8	19	10	39	18
25 to under 50	1	0.2	2	9	0.9	24	10
50 to under 75	0.3	0.1	1	7	0.4	0	11
75 and above	0.1	0.03	0.4	11	0	0	9
Total	100	100	100	100	100	52	33

Source: Calculated using Pakistan Bureau of Statistics 2010-11 Data (Mellor, J. W., & Malik, S. J. (2017). The impact of growth in small commercial farm productivity on rural poverty reduction. World Development, vol. 91, p 1-10).

or are linked with the rural economy. Within the agriculture sector, the skewed pattern of land distribution has also exacerbated inequality (Table 2). This has been complemented by a policy environment that largely benefitted the rich and mechanized farmers. Resultantly, for decades, poverty remains a rural phenomenon in Pakistan.

The accumulation of land in a few hands has empowered feudalism in our agrarian system which is cognizant to the running political setup. A comprehensive plan is required to bring back agriculture to the fast track, free from any political influence. Over time, the agriculture sector has faced many issues including a lack of latest technology and basic equipment, climate change, expensive fertilizers, lack of water, weak canal system and inadequate skills of farmers. At the international level, the agriculture sector saw a rapid boost owing to the incorporation of ICT, however, Pakistan failed to catch up timely. The major challenge faced in this respect is the lack of skilled labor force. Universities and research institutes have not fully succeeded to produce that standard of research which could facilitate agriculture in the very perspective of industrialization in the country. The results are partly evident in the

shape of de-growth of this sector (evidence of negative agriculture growth for some years), and partly in the unequal distribution of economic resources.

In 1950-60, Pakistan adopted a development strategy by promoting industrialization through import substitution policies. This was a period of rapid economic growth in Pakistan. However, in later years, the role of the private sector was massively curtailed through a policy of nationalization. State led heavy industries were promoted. Engineering, cement, oil refineries, chemicals and many other industries, together with shipping, banking, life insurance and power utilities, were nationalized. Export trade in rice and cotton was made a state monopoly. The nationalizations led to drying up private investment and economic growth slowed sharply.

In the 1980's, a gradual process of privatization was initiated. Industries were slowly denationalized, however, massive public sector investment programs in heavy industry continued. State ownership of the banking sector was maintained and used to channel funds at low interest rates to cronies. There were large capital inflows in

the form of international assistance. These inflows were supplemented by a sharp increase in workers' remittances. As a result, in the 1980s, Pakistan experienced rapid economic growth. But it did not sustain this growth for it was accompanied by growing fiscal and current account deficits financed by domestic borrowing and large inflows of foreign assistance.

In the post 1988 period, widespread policy reforms including privatization, investment deregulation, trade liberalization, financial liberalization and tax reforms were adopted. Hence, Pakistan has experienced a pattern of 'Stop-and-Go' growth, with the longest expansion being from 2003 to 2008. However, this set of policies cannot be said to constitute a development strategy. The assumption seems to have been that these policies would somehow put the country on a high and sustained growth path. Unfortunately, as was the experience of many developing countries in the 1990s, it did not. One of the lessons of the era of the 1990s is that countries need to pursue growth strategies rather than just practice stabilization and efficiency⁵ (See Table 3).

The services sector in Pakistan has

Table 3: Policy-cum-Plan Review of the Five Year Plans

Five-Year Plans	Policies	Implementations and Results	Pro-poorness /Inclusiveness
First Five-Year Plans (1955-60)	Increase in national income, establishment of industrial and agriculture sector, rehabilitation of railway, improved school enrollment rate, creation of employment opportunities, reducing regional disparities.	Increase in national income up to 13 percent, employment situation got worse, industrial sector experienced a boost, the literacy rate declined.	В
Second Five-Year Plans (1960 1965)	Develop self sufficiency in food related items, reduce import of food related items, no industries are reserved for private sector, foreign capital should experience a positive change.	With more facilities for the private sector, the industrial set up accelerated; resultantly created more jobs opportunities.	A

^{5.} Hamid, Naved. (2008). "Rethinking Pakistan's Development Strategy." University Library of Munich, Germany, MPRA Paper. Available at https://www.researchgate.net/publication/24046598_Rethinking_Pakistan's_Development_Strategy

Third Five-Year Plans (1965-1970)	Promoted the activities of private sector investment, promoted small scale enterprises, war with India has major impact on various plans.	The small scale enterprises experienced a boost. The industrial sector progressed more than the agriculture sector.	Α
Fourth Five-Year Plans (1970-1975)	The share of the industrial sector was decreased mainly due to the separation of Bangladesh. Five-year plan was abandoned after the fall of Dhaka.	Decline in the manufacturing sector, low level of investment and shortage of raw material.	С
Fifth Five-Year Plans (1978-1983)	Increased defense expenditures and a flood of refugees to Pakistan, emphasized on completion of construction of Pakistan steel mill, fertilizers and cement factories. Targets of industrial sectors were achieved; balance of payment was kept under control.		С
Sixth Five-Year Plan (1983-88)	Targeted to cater low investment and savings ratios; low agricultural productivity; heavy reliance on imported energy; health and education.	Despite drought in 1986-87 the growth targets were well achieved, large scale and manufacturing industries growth was satisfactory.	В
Seventh Five-Year Plan (1988-93)	Major emphasis was placed on energy, transportation and communications, water, physical infrastructure and housing. Less financing for corporations.	Private investment increased in this period but share of industry showed a major decline.	В
Eight Five Year Plans (1993-98)	Major emphasis was on industrial development as compared to agriculture, expansion of tax structure to reduce budget deficit, implementation of agriculture taxes.	Privatization and deregulation has given positive feedback, small scale industries growth at higher rate, manufacturing industry also showed positive trend.	В
Ninth Five Year Plans (1998-03)	Opportunities of employment and income generation among poor, price stability, safe drinking water, primary health care facility, universal primary education, and shelter.	Rural development, improved irrigation, energy projects, roads development and adult education targets were achieved.	D
Medium Term Development Framework	Strengthen civil infrastructure, focused on education, labor trade and taxation. Planned to develop knowledge based economy. Targeted MDGs like reduction in poverty.	tion, labor trade and taxation. Planned to MDGs were replaced with SDGs as Pakistan pp knowledge based economy. Targeted failed in most.	
Eleventh Five Year Plans (2013-18)	Vision 2025, putting people first, achieving inclusive growth, democratic governance, institutional reforms, food security, entrepreneurship-led growth and development of knowledge economy.	Significant reduction in poverty but brought huge income inequality. Laptop scheme for knowledge economy failed to achieve the targets. Vision 2025 targets were not achieved.	D

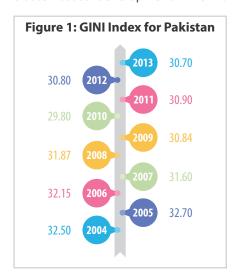
Source: Author's own construction: A: Excellent, B: Fairly Good, C: Somewhat, D: Not at all

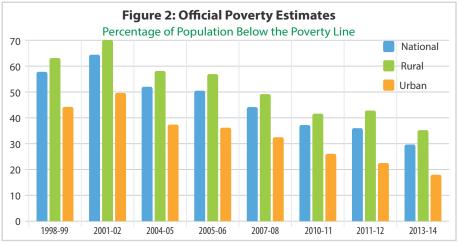
experienced an increasing trend since the last few decades. As a proportion of the GDP, the services sector contributes to more than 50 percent of the total economy. The major classifications in the services sector include distributive services (transport, communication, wholesale, retail trade and hotels), producer services (financial institutions like banks), and social services (defense, education and health). In case of the services sector, information technology may optimally be employed for cluster based development which is

generally fairly charged of inclusive growth. In order to improve this sector, quality research and development, technological upgradation and human resource development are requisites. The lack of these has caused the loss of the huge potential to create more equitable and gender harmonized jobs in the economy.

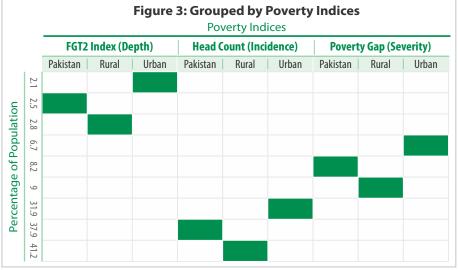
The growth pattern of Pakistan's economy reflects inconsistency and lack of long term planning. This has implications on the distribution of wealth and income.

Pakistan's Gini coefficient points towards a high tendency of income inequality (Figure 1). One dimension of inequality is the widening gap between urban and rural areas. As reflected in figure 2 and 3, incidence of poverty in rural Pakistan is not only high compared to urban areas, but in fact, the gap between them is widening. Urban areas have witnessed a rapid reduction in poverty in comparison to rural areas, reflecting that growth has not been pro-poor (Figure 4 & 5).





Source: Constructed using Pakistan Economic Survey Data (2015-16)



Source: Constructed using SPDC Report (2017), "Poverty and Vulnerability Estimates: Pakistan, 2016."

trend since 2002 (Figure 6). However, the employment elasticity in the industrial sector is low (Figure 7), mainly because of the prevalence of small scale industries, low skilled workers, high cost of inputs, limited use of technology, and the capital intensive nature of production.

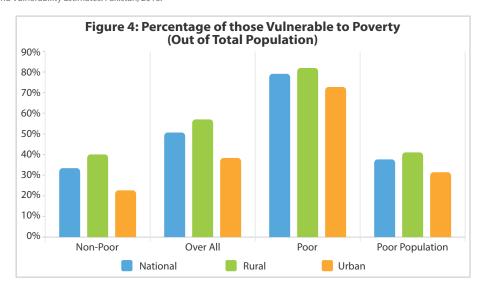
Gender also has an integral role to play if inclusive growth is to be ensured. In the industrial sector, the employment of males is greater than that of the females (Figure 8). Promoting female employment in every sector of the economy, especially in small and medium scale enterprises, will contribute towards inclusive growth. Vocational training in industrial skills for females can help promote women employment in the industrial sectors.

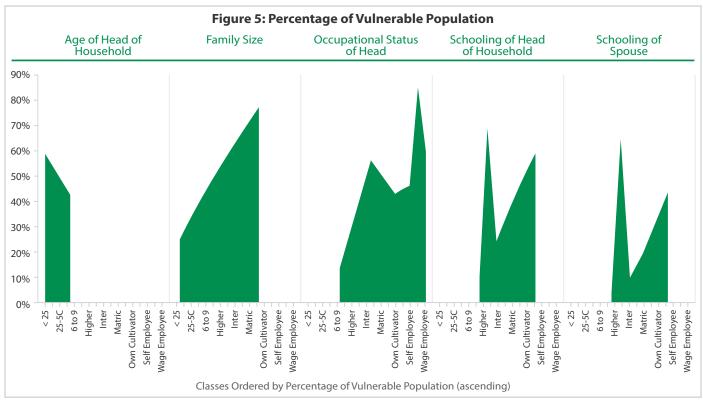
Challenges and an Opportunity to Promote Inclusive Growth

Industrial Policy

The industrial sector offers huge potential for inclusive growth in Pakistan. While its share in the economy has stagnated over the period of time, in recent years it has recorded positive growth. The growth in the industrial sector is 5.8 percent higher now as compared to the fiscal years 2016-17 (5.4 percent) and 2015-16 (5.6 percent).

The share of the industrial sector in employment in Pakistan is around 23.7 percent, and it has shown an increasing





Source: Constructed using HIES Data (2015-16)

^{6.} Social Policy and Development Centre (2017), "Poverty and Vulnerability Estimates: Pakistan, 2016." Available at http://spdc.org.pk/Data/Publication/PDF/RR-99.pdf

^{7.} Pakistan Today Profit (2018), "Industrial sector grows at 5.8pc in FY2018." Available at https://profit.pakistantoday.com.pk/2018/04/23/industrial-sector-grows-at-5-8pc-in-fy2018/

Figure 6: Trend Analysis of the **Rate of Employment in Pakistan** 24.5 23.5 22.5 21.5 20.5 19.5 18.5 17.5 16.5 2001 2003 2005 2007 2009 2011 2013 2015 995 1997 999 991

Source: Constructed using World Development Indicators Data (World Bank)

Potential of Inclusive Growth through SMEs

The increasing globalization trend, higher regional integration and growth of global value chains increases opportunities for small medium entrepreneurs. These come from the consequences' of product fragmentation and due to specialization for specific activities.

SME's have a huge potential for bringing sustained growth in Pakistan. 3.2 million enterprises working in Pakistan are SMEs.⁸ The SMEs' share of labor is about 78 percent in industry and approximately 35 percent in terms of value addition. The 53 percent share which SME activities consists of include retail trade, restaurants and wholesale.⁹

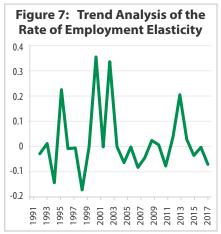
The development of trade corridors can further boost SME potential in Pakistan. These corridors offer SMEs the ease of accessibility to markets and promote regional integration. They provide important connections between economic nodes or hubs that are usually centered in the urban landscape. They play an impressive role to improve the flow of goods thereby helping trade and boosting

the economy. The CPEC offers huge opportunities for development of SMEs, provided these are well integrated and linked with industrial development in China and the right policy incentives are provided to SME's for growth.

The China-Pakistan Economic Corridor (CPEC)

The inclusiveness of economic growth may be visualized in the very perspective of the CPEC.¹¹ Corridor development bears significant impact on inclusive growth through different channels such as increasing hard infrastructure, improving trade, optimal utilization of available resources, and providing incentive to small framers/producers/sellers for easy and enhanced access to national and international markets. Through access into Pakistan, the CPEC will allow China to get access to Pakistani exports' markets like that of UAE and Afghanistan. However, Pakistan will be confronting a big challenge of maintaining comparative advantage and gaining competitive advantage in its exports. With the international demand for Chinese products much higher due to price and variety, the pressure on Pakistani exports (especially cotton and leather products) to Afghanistan and Middle East, will increase manifold hence leading to a reduction in our exports and trade volume.12 This will have implications on employment and hence inclusive growth.

In this context, economic corridors likes CPEC connect economic agents along a defined geography. The main motive and approach of such economic corridors is to gain infrastructure, transport and logistics, services, and derive economic potential. This approach is called the 'spatial development initiative' and was initially used in the (MDC) Maputo Development Corridor. CPEC is also helping Pakistan in developing a sea port in Gwadar along with easing challenges in energy and infrastructure. There is an optimism regarding its

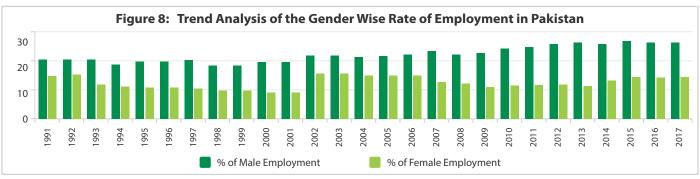


Source: Constructed using World Development Indicators Data (World Bank)

economic performance and its ability to make Pakistan emerge as one of the fastest growing and promising global economy.¹³

One aspect that needs consideration are special tax policies and rebates for industries established by the Chinese and its impact on local manufacturers. Similarly, industrial development projects under CPEC are aimed at the development of new industrial zones. The new production policy of China focuses on establishing processing units in neighboring countries. Again, these policies need to be considered from the lens that they should support industrial development in Pakistan by creating interlinkages with local industries.

Theoretically, it is true that CPEC will open opportunities of accessibility to foreign markets, but risks and competition for domestic producers may increase considerably due to cracks and crevices in the institutional paraphernalia of Pakistan. In such a scenario, the local industry can be protected through industry friendly policies and provision of incentives of subsides, trainings, tax rebate, bonus and best business leader awards at the national level. Institutions related to trade will have to be strengthened and trade related policies be revised to protect the domestic



Source: Constructed using World Development Indicators Data (World Bank)

- 8. Bureau of Statistics (20015), "Pakistan 2005 Economic-Census." Available at http://www.pbs.gov.pk/content/economic-census-2005
- 9. The information in this section has been compiled from the Population Census of Pakistan 2017-18 as reported in their preliminary report or the information supplied by Pakistan Bureau of statistics. The final report of population census is not uploaded yet so it's from the preliminary report provided by PBS.
- 10. ADB Working Paper Series on Regional Economic Integration August 2013.
- 11. The CPEC project has been agreed upon as part of the Pakistan-China strategic partnership. This USD 46 billion project is a long term development plan from 2014 to 2030. There are five main components, including development of Gwadar, Energy, Transport, Infrastructure, Investment & Industrial Cooperation on mutually agreed areas.
- 12. Business Recorder, Wajahat Rehman (2017), "CPEC's likely effects on local manufacturing." Available at https://fp.brecorder.com/2017/02/20170227145481/
- 13. Zafar Mahmood, "Opportunities and Challenges of Special Economic Zones under CPEC for Pakistan."

producer and industry. The government should relax policies, taxes and duties for local export oriented businesses and manufacturing units so that a competitive edge of local manufacture can be maintained.

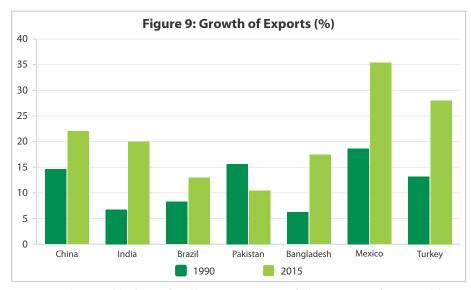
Public Sector Enterprises (PSE) Development in Pakistan

Since long, Pakistan has had a heavy footprint of public sector enterprises. Initially, these were conceived as state interventions to establish industries that were critical for economic development and where private sector had limited incentive. PSE also contributed towards employment generation. However, these PSEs have become a huge burden on public exchequer, with financial losses from these PSEs accumulating to PKR 1.2 trillion (4 percent of GDP) in 2018. It is important to review the public enterprise sector in Pakistan and see the reforms needed therein to enhance their economic viability and also, if there is a need to privatize these. The need of the hour is to have inclusive growth policies which can generate employment in the PSEs by introducing the I.T sector and advance production techniques. This is also another effective remedy to decrease inequality and generate income.

Private Sector Enterprises Development in Pakistan

The role of the private sector has gradually increased in Pakistan. Post the 1990's, liberalization, good governance and privatization policies heavily promoted the private sector. The share of the private sector in telecommunication and textile is 100 percent. Approximately 77 percent is in commercial banking while a significant part of the cement, sugar, automobile and fertilizer sectors are in the private sector. Currently, the private sector is also contributing in energy and oil sectors.¹⁴

Issues faced by the private sector include macroeconomic stability, weak industrial policy and regulatory framework, infrastructure deficit, lack of education and human development and limited financial instruments to encourage investment in the industrial sector. There is much more potential for the private sector to expand as



Source: Ejaz Ghani & Musleh ud Din & Afia Malik, 2017. "An Assessment of Pakistan's Export Performance and the Way Forward." ²⁰

reflected by a recent surge in gross fixed capital formation, and this must be aided by extensive reforms by the government to incentivize and attract private sector participation.

Lessons learnt

Since the last half a century, industrial development in Asia has been a main contributor in economic growth in countries such as China, India and Taiwan etc. Even Bangladesh, a late starter on industrial development has witnessed significant growth in the industrial sector. Unfortunately, compared to regional counterparts, industrial development in Pakistan has not maintained the requisite pace. Development of small and medium sized industries could be a good starting point.¹⁵

The model adopted by countries like China, Taiwan and South Korea was to invest in low scale businesses and unskilled workers by using low cost raw material in small scale industries so that the income level of the poor could be improved. Thus, the production of the industrial sector was enhanced leading to an increase in the number of exports' products and the overall output at the national level. In all these success stories, employment generation was the core idea for promoting inclusive growth.

Structural Issues in Pakistan's Economy

A critical structural issue is the low share of

the industrial sector in the economy. The share of the industry stands at around 19 percent, while agriculture and services sector are at 25 percent and 56 percent, respectively.¹⁶ This phenomena has been referred to as 'premature deindustrialization'. This has been accompanied with a rise in the informal sector of the economy in Pakistan.¹⁸ It is estimated that 73 percent of Pakistan's labor force is employed in the informal sector.¹⁹ Informal sector is marred by low wages, lack of job security and precarious work conditions. Consequently, a large number of working people are poor and are unable to materialize upward socioeconomic mobility. Thus, Pakistan's economy does not only need to expand its size, but it has to produce quality jobs.

Another area of contention is Pakistan's poor performance in the exports sector as compared to other countries in the region. As a result, Pakistan's economy is continuously under the pressure to address the balance of payment crises. In sharp contrast from Pakistan, the growth of exports in both India and Bangladesh has been five times more than Pakistan (Figure 9).

In 2017, an economic growth rate of 5.8 percent was reported. This is the highest growth rate witnessed in the past decade. According to State Bank of Pakistan estimates, Pakistan's economy needs to grow almost 6.3 percent/year in order to absorb 1.3 million new entrants in the job

^{14.} Asian Development Bank (2008), "Private Sector assessment Pakistan." Available at https://www.adb.org/sites/default/files/institutional-document/32216/private-sector-assessment.pdf

^{15.} The Japan External Trade Organization (JETRO) conducted a survey on Pakistan, India, Sri Lanka and Pakistan in 2008, in which 235 respondents were included, with a target to figure out the major business problems faced by South West Asia. The results delineated that all these countries are facing increasing pressure to lower their cost. For further information, please refer to https://www.jetro.go.jp/ext_images/en/reports/survey/pdf/2009_06_05_biz.pdf

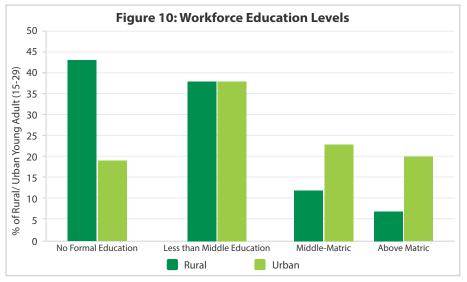
^{16.} Danish Khan (2017) "The Interplay of 'State' and 'Class' in the Processes of Post-Colonial Development: Re-Conceptualizing Economic History of Pakistan", Political Economy Research Institute (PERI), University of Massachusetts-Amherst, Working Paper No. 447, December 2017.

^{17.} Rodrick, Dani (2015), "Premature Deindustrialization," School of Social Science, IAS, Princeton. Available at https://www.sss.ias.edu/files/pdfs/Rodrik/Research/premature-deindustrialization.pdf

^{18.} Danish Khan (2018) "Re-Conceptualizing Political Economy of the Post-Colonial State of Pakistan: Interactions among Space, Class and Institutions", in McCartney, Matthew and S Akbar Zaidi (Editors), New Perspectives on Pakistan's Political Economy: State, Class and Social Change, Cambridge University Press, Cambridge, UK, Forthcoming.

^{19.} ILO (2012) Statistical update on employment in the informal economy, Department of Statistics, International Labour Organization (ILO).

^{20.} Ejaz Ghani, Musleh ud Din & Afia Malik (2017). "An Assessment of Pakistan's Export Performance and the Way Forward," Working Papers, IDEAS. Available at https://pide.org.pk/pdf/Seminar/Pakistans-Export.pdf

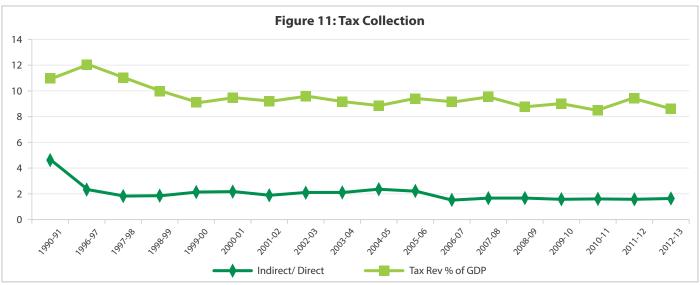


Source: UNDP Pakistan, Ali Cheema (2014) "Pakistan's Demographic Transition: Young Adults, Human Capital and

issue faced by Pakistan's economy.

Current account deficit is another major issue of Pakistan's economy. The country's revenue generation is not at pace with its expenditures. As a result, the economy is running a high current account deficit. Tax collection is very low as tax to GDP ratio hovers around 10 percent (Figure 11). As a result, the government opts for austerity measures and important social sectors such as education and health remain severely under-funded.

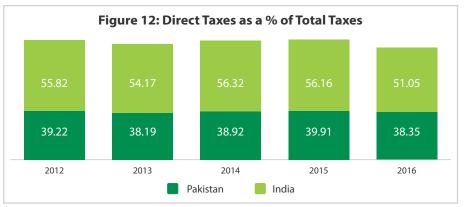
However, low tax to GDP ratio is not the only problem in terms of revenue collection. The manner in which tax is collected also poses a big problem with regards to inclusive growth. The share of indirect taxes stands at 62 percent of total tax revenue and direct



Source: Oxfam, Abid Burki, Rashid Memon and Khalid Mir (2015) "Multiple inequalities and policies to mitigate inequality traps in Pakistan." 23

market. Currently a large share of new jobs is created in low productivity sectors of the economy.²¹ Furthermore, labor productivity in Pakistan is among the lowest in the developing world.²² One of the major contributors to low productivity is the fact

that education and skill levels are below par among the workforce in Pakistan (Figure 10). The alarming fact is that a large share of the young workforce is stuck at low level equilibrium in terms of education and vocational skills. This is a major structural



Source: LCCI, Tax Unit (2017), "A Regional comparative analysis of tax revenue trends."

taxes only comprise 38 percent of total government revenue. In comparison, in India, the share of direct taxes is 51 percent and the share of indirect taxes is only 49 percent (Figure 12 & 13). Direct taxes are usually progressive in nature, that is, rich segments of society pay via direct taxes as compared to poor segments of society. Thus, this acts as a redistribution mechanism. On the other hand, indirect taxes are regressive in nature as both rich and poor have to pay the same rate of taxes. As a result, poor segments of society are at a disadvantage due to indirect taxes. This is a major impediment in the way of achieving inclusive growth in Pakistan.

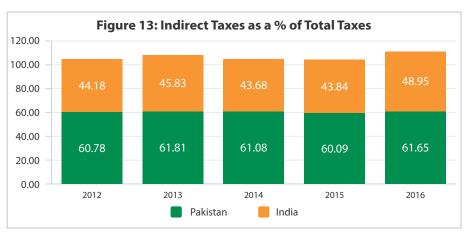
Successful Transformations: Lessons for Pakistan

China and South Korea have successfully

- 21. UNDP Pakistan, Ali Cheema (2014) "Pakistan's Demographic Transition: Young Adults, Human Capital and Jobs." Available at http://nhdr.undp.org.pk/wp-content/uploads/2015/06/7.-Ali-Cheema-Skills-16Dec14.pdf
- 22. World Bank (2012) Labor Market Policies Under a Youth Bulge, World Bank Policy Paper Series on Pakistan PK 14/12: Washington, DC.
- 23. Oxfam, Abid Burki, Rashid Memon and Khalid Mir (2015) "Multiple inequalities and policies to mitigate inequality traps in Pakistan." Available at https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/rr-multiple-inequalities-pakistan-110315-en.pdf
- 24. UNDP Pakistan, Ali Cheema (2014) "Pakistan's Demographic Transition: Young Adults, Human Capital and Jobs." Available at http://nhdr.undp.org.pk/wp-content/uploads/2015/06/7.-Ali-Cheema-Skills-16Dec14.pdf

transformed their socioeconomic landscape in the aftermath of the Second World War. These countries not only achieved rapid growth rates, but also improved the living standards of millions of their citizens. Both China and South Korea undertook redistributive land reforms to promote equality and efficiency in agriculture, which was the mainstay of their economies in the 1950s. By using large surpluses from agriculture, both countries undertook large scale industrialization and created millions of jobs. Since the 1960s, South Korea opted for an export-led development policy regime and it allowed them to climb up the economic ladder. China has opted for a similar route (Figures 14&15).

Similarly, both South Korea and China prioritized investments in education. This not only empowered their citizens, but it also allowed both countries to increase productivity of their workforce. The transformation in their educational landscape is proxied by the fact that both countries have now achieved universal



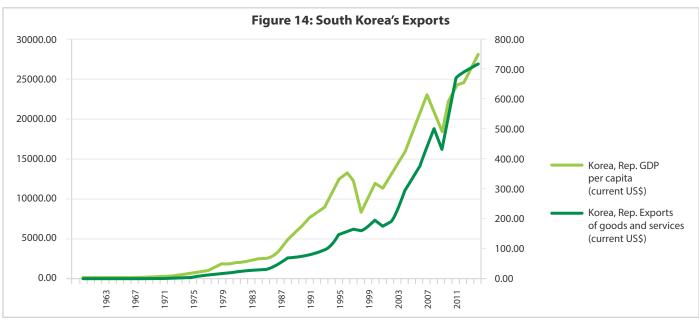
Source: LCCI, Tax Unit (2017), "A Regional comparative analysis of tax revenue trends."

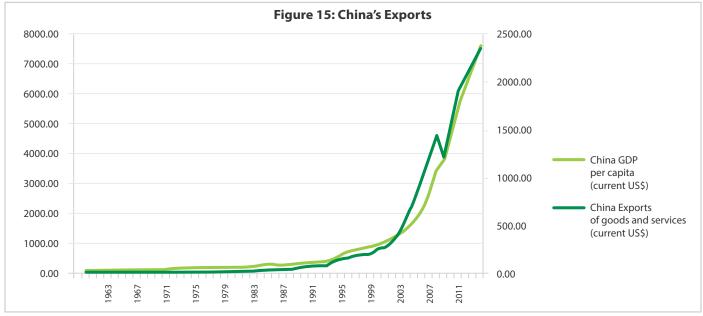
literacy rates (Figures 16 & 17). Hence, these two countries offer good examples to learn from.

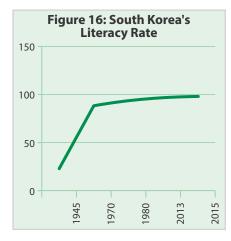
marketing efficiency, equitable disbursement of credit, supply of water and other inputs. These may include customized subsidy and rebate packages.

Way Forward

Comprehensive agrarian reforms are mandatory for uplifting the rural poor and landless class. These reforms should encompass equitable distribution of land, Livestock sector has grown at a good pace with fairly pro-poor growth. This sector can still grow manifold with the inclusion of technology and investment, value addition and marketing of milk, meat and poultry,







and other finished value added products. The lessons learnt from this sector can be replicated to other sectors as well. If forward and backward linkages are properly established through policy initiatives, we can even make this agriculture production export driven.

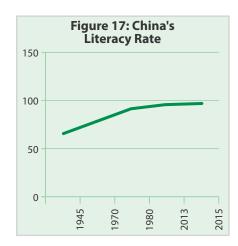
In order to achieve inclusive sustainable development, there is a need of 'supply push and demand pull manufacturing' at the level of small scale enterprises. There is no second thought on the creation of employment opportunities so that income

could be generated through mobilization of the export sector. This is attributed to innovations and use of new techniques and methods in the industrial sector mainly at the small scale, so as to increase growth. This is to be achieved by employing skilled labors who have prior knowledge of information technology and innovative techniques of enhancing production.

In Pakistan, the huge challenge of an undocumented economy can be resolved by the appropriate use of technology. Documented economy is necessary for increasing the tax net and resource base of the country.

Promoting the private sector is a forceful driver of inclusive growth. This sector can be engaged in development and establishment of model high tech markets. Competition amongst private entrepreneurs will also improve service delivery.

Entrepreneurship abilities of women need to be enhanced, both for the rural and urban poor. Skill development centers and vocational training institutes should be established in collaboration with the private sector. The targeted provision of



social safety nets to extremely deserving people should be practiced.

Pakistan's growth and development strategies need to be revisited. Major structural reforms are required to improve labor productivity of Pakistan especially in public sector institutions. Employment in major sectors of the economy and trade buoyancy may be the leading drivers of inclusive growth in the years to come (See Table 4).

Table 4: Macroeconomic Strategies for Trade

Time Period	Strategy	Remarks	Fiscal & Monetary Policy	Ranking of Inclusiveness
1950's to 60's	Import substitution	To protect local infant industries	Expansionary Monetary policy: credits at subsidized rates	В
1960's to 1970's	Mix strategy	Bonus voucher scheme for import substitution & export growth, liberal schemes.	Monetary expansion less than previous era: private sector reforms, high credit MS had Fallen due to 1965 war, crop failure	Α
1970's to 80's	Exports promotion	Trade Restrictions were removed and exports promoted by launching different reforms	Expansionary monetary policy: High MS leads to low growth and high inflation	С
1980's to 1990's	Exports promotion	Stabilization and structural reforms in exports with great side effect of BOP crises	Fiscal deficit by external borrowing and from banks, caused high inflation up to 12.6 percent in 1981-82 Inflation remained under control in 1985 at 6 percent due to low foreign loans and SAL (structural adjustment loans)	В
1990 to 2002	Exports promotion	With improvement of BOP and foreign capital and financial inflows	Inflation high, interest rate high, low GDP, high external deficit, high poverty	D
2002 to 2007	Exports promotion	Textile sector growth with unstable political and bad infrastructure	Macroeconomic crisis, high inflation, high unemployment and poverty 2004-05 economic growth at 8.6 percent, peaked economic regime Tight monetary policy in 2006	В
2008-09	Import substitution	Due to financial crises and BOP deficit and mainly import substitution in agro-industry	Monetary expansion and fiscal imbalance: Low inflation, low poverty to 22.3 percent, and unemployment reduced	С
2008-2010	Exports promotion	Strong economic reforms by the Pakistan Govt. in the industry and financial system	Expansionary fiscal policy in 2008, but could not be sustained due to deficit, law and order pressure, weak fiscal performance	В
2010-2018	Mix strategy	In this era, due to protectionism, the scope of export orientation was limited so support of import substitution was the policy of the govt.	Stagnant monetary policy but rise in fiscal policy tax collection low high expenditures	D

Key: A: Excellent, B: Fairly Good, C: Somewhat, D: Not at all



Opinion

Economic Corridor Development and Multidimensional Poverty in Pakistan



Principal Economist Pakistan Resident Mission Asian Development Bank

Introduction

The main purpose of development is to improve the welfare of the people. The emphasis on people's welfare is particularly important for a country like Pakistan, where poverty is acute and manifests in many different forms, such as lack of access to basic needs and services, education, health,



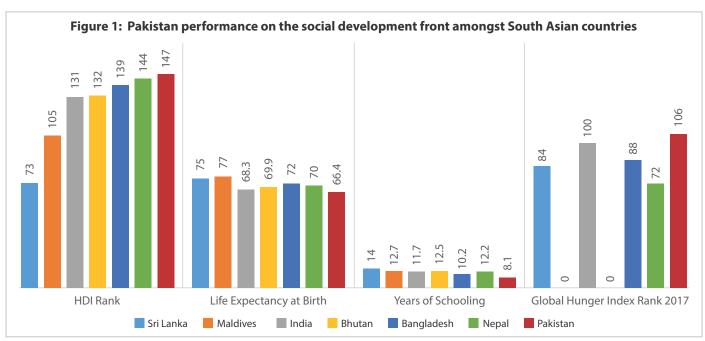
Consultant
Pakistan Resident Mission
Asian Development Bank

and water and sanitation. All these deprivations are captured in the multidimensional poverty index (MPI) but not in the income or expenditure-based poverty measures. Accordingly, MPI is more appropriate for measuring development progress and is also in line with the Sustainable Development Goals.

Pakistan's performance in reducing monetary/income poverty is reasonably well, but not so in improving the social indicators. Over the last decade, the income poverty rate at the national level has declined by over 50 percent, to 24.3 percent in 2015-16.² The Government's Benazir Income Support Program (BISP), a direct cash transfer program for female headed poor households, might help in reducing poverty, but more needs to be done to ensure that no-one should be left behind in our fight against poverty and to improve overall social indicators.

Pakistan's performance on social indicators remains below par by regional and global standards. For example, Pakistan is ranked the lowest amongst South Asian countries in terms of the Human Development Index (HDI), and the Global Hunger Index (GHI).³ And the performances in other related indicators is not encouraging either (Figure 1)

The inconsistent relationship between economic growth and socio-economic indicators in Pakistan necessitates a more



Source: UN and ADB social indicators database

^{1.} The views expressed in this article are those of the authors and do not necessarily reflect the views and policies of the Asian Development Bank (ADB) or its Board of Governors or the governments they represent. ADB does not guarantee the accuracy of the data included in this article and accepts no responsibility for any consequence of their use.

^{2.} National Poverty Report 2015-16, Planning Commission of Pakistan.

^{3.} GHI captures four elements including undernourishment, child wasting, stunting and mortality.

comprehensive approach to measure poverty and therefore MPI is needed. MPI considers poverty as a multi-faceted phenomenon beyond income-including other dimensions of deprivation such as health, education, housing and others related to living standards. The MPI approach is therefore important as a framework for examining how economic corridor development (ECD) and other development should be conducted. This is to ensure that the development results are more inclusive and sustainable.

MPI Situation in Pakistan

It is estimated that 38 percent of the people in Pakistan are still multi-dimensionally poor and they are, on average, deprived in 44 percent of the weighted indicators (Figure 2).

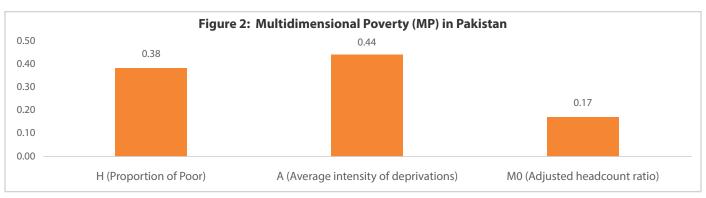
MPI in rural areas is much higher (almost 46

routes. Moreover, the results show that the use of unhealthy cooking fuel, overcrowded housing, houses with unimproved walls, inadequate sanitation and lack of small assets are also contributing to the deprivation and this is applicable across all the three routes. Moreover, schooling facilities and under usage of health facilities are other indicators where deprivation is moderately high. All these key dimensions of MP are unlikely to be addressed directly by the projects under CPEC. Therefore, income generation through the creation of employment and others resulting from the projects under CPEC, must be supplemented with investments on public utilities to improve the key dimensions highlighted in the MPI framework. This is to ensure that the CPEC impacts are "pro poor".

The finding is further confirmed by the logistics regression results showing the

reducing MP in Pakistan. This is so as there are other factors that need to be improved such as child immunization, better housing condition, access to safe water, suitable cooking oil and more years of schooling, for a meaningful reduction in Multi Dimensional Poverty.

Therefore, to achieve "pro-poor" impact of the ECD that results in more inclusive growth, the government should develop complementary and targeted measures. This is in line with the objectives of ECD and the government of Pakistan's Vision 2025 to reduce the poverty level by half in 2025. Some of the potential policies include government intervention in employment and development of small businesses for local people, coupled with the provision of public utilities such as schools, healthcare, and improved sanitation and so forth.



Source: Estimated using PSLM 2014-15

people out of 100 in rural areas are multidimensionally poor) as compared to urban (less than 7 percent are poor in urban areas), and inter-provincial comparisons show that the poorest province is Balochistan (39.4 percent), which has more than double poverty incidence compared to the least poor province of Punjab (15.2 percent). impact of relevant factors in reducing MP in Pakistan. They indicate that although economic growth and employment are necessary conditions for poverty reduction, the impact in reducing MP is marginal. This is broadly consistent with the results of a range of studies for Pakistan as well as globally. For example, a recent study which

To sum up, a successful strategy of poverty reduction must have at its core, measures to promote rapid, sustained and inclusive economic growth. The key challenge is to combine growth promoting policies with policies that allow the poor to participate fully in the opportunities unleashed and so contribute to that growth. In this light and

Table 1: MP Measurements for the Proposed CPEC Routes

Routes	Major Districts covered	MDP
Central Route	Gwadar, Turbat, Panjgur, Khuzdar, Ratodero, Kashmore, Rajanpur, D.G.Khan, D.I.Khan, Bannu, Kohat, Peshawar & Hasanabdal	0.26
Eastern Route	Gwadar, Turbat, Panjgur, Khuzdar, Ratodero, Kashmore, Rajanpur, D.G.Khan, Multan, Faisalabad, Pindi Bhatian,, Rawalpindi & Hasanabdal	0.21
Western Route	Gwadar, Turbat, Hoshab, Panjgur, Besima, Kalat, Quetta,, Qila Saifullah, Zhob, D.I.Khan, Mianwali, Attock & Hasanabdal	0.46

Source: Estimated using PSLM 2014-15.

In establishing the impact of CPEC upon MP, the three routes of connectivity proposed under CPEC are examined to estimate the likely impacts of ECD on MP. This is important to ensure that ECD is inclusive (Table 1).

The analysis reveals that the incidence of MP is highest in the CPEC western route compared with the eastern and central

examined the empirical relationship between economic growth and MP for 78 developing countries including Pakistan, concluded that while economic growth seems to contribute to a reduction in MP, its impact is, at best, quite moderate, with an elasticity well below unity. This clearly shows that if ECD is to generate employment and economic growth alone, it is expected to have only moderate impact on

moving forward, the government of Pakistan and other key stakeholders must work together to ensure that ECD creates maximum opportunities for the most deprived segments of the society to promote inclusive growth. As the founder of Pakistan Mr. Muhammad Ali Jinnah would say, "Devotion to one another".

^{4.} Santos, M. E., Dabus, C., and Delbianco, F. (2016). "Growth and poverty revisited from a multidimensional perspective." OPHI Working Paper 105, University of Oxford. Available at https://www.ophi.org.uk/wp-content/uploads/OPHIWP105.pdf

Opinion

Entrepreneurship, Technology and Innovation: The State as an Agent of Change



Former Coordinator General COMSTECH (OIC Standing Committee on Scientific and Technological Cooperation)

Rector, Ghulam Ishaq Institute of Engineering Sciences and Technology

Introduction

Pakistan is currently faced with a serious risk of de-industrialisation and will remain vulnerable to the 'low skills, low productivity, low expectations' trap, unless the dynamics and disruptive nature of modern technology are better understood and embedded as a key pillar of public policy. This requires a better understanding of the role of technology and its spill overs as a major driver of development and growth. Without this re-orientation, Pakistan is likely to miss out on major organisational changes brought about by the technoinformation revolution in the 21st Century. Competitiveness is falling, organisational changes are slow, and workforce skills are inadequate, all of which have caused a stalling in productivity and innovation.

It is important that the state must be the agent of change in managing technology and providing technology intelligence in order to promote productivity and entrepreneurship, especially in SMEs.

The Global Imperatives

In order to identify public policies which

can promote better acquisition and management of technology in Pakistan, it is necessary to appreciate the emerging morphology of the global economy, whose distinctive features are:

- From the 1970s to 90s, it was shown that manufacturing could be done anywhere, a shift² which appears to be irrevocable; now designing too can be undertaken anywhere.
- ii. Almost all developed economies can now be identified as "knowledge economies" to some extent or the other, and they are taking further steps to consolidate this position by becoming even more knowledge intensive and competitive. Even when their productivity growth has slowed down, the rate of increase in their skill base in technology has not. Other intrinsic factors remain development of institutional excellence and fast moving human resources, coupled with strategic alliances for complementary resources.
- iii. The developing countries too are witnessing a sharp reduction in relative demand for unskilled labor since the end of the 1970s. In all these emerging economies, public policy has played the major role.
- iv. In some newly industrialized Asian countries, such activities have already led to the evolution of small and medium enterprises (SMEs) into major global players and conglomerates. These now offer complete end-to-end services in the supply chain, whether as manufacturers of piece parts and systems, or providers of services, design and research.
- v. However, STI (science technology and Innovation) alone is not a magic wand. Economic advancement is an extremely complex process, and lessons from extensive growth

accounting studies show that countries trying to play 'catch-up' cannot replicate exactly those who have gone before. A successful transition requires a strong congruence between a country's technological and social capabilities.

Current State of Technology, Entrepreneurship and Innovation in Pakistan

The Global Competitive³ Index, 2017-18, identifies a range of '12 pillars' contributing to productivity and competitiveness. Four of the pillars are directly linked to education, health and skills, while indirect pillars include technological readiness (which measures how a country implements existing technologies to improve productivity), in addition to labor market efficiency.

Pakistan's overall rank out of 137 countries is currently low at 115, compared with 53 for Turkey, 40 for India, 23 for Malaysia and 24 for Ireland. Table 1 summarises the ranking of these selected countries for the 9th and 12th Pillars of the Global Index, related to technological readiness and capacity for innovation respectively.

Patents (last row) is an important proxy for technological advancement. This is mainly because low investment in education inhibits acquisition of technological skills and hence poor ranking towards patents. Pakistan fares guite badly in this sector. In comparison, Ireland improved the education and skill profile⁴ of its workforce from 50 percent with primary education in 1972, to 8 percent in 2002, while share of those with tertiary education increased from 9 percent to 35 percent during the period. The rankings (Table 1), together with the content⁵ of our exports (Figure 1) explain why Pakistan is sliding towards deindustrialisation.

Our exports of manufactured goods or services, high technology items or ICT are almost non-existent. The country seems to be moving inexorably from an agrarian to a

^{1.} He has been involved in R&D, teaching and production valued at over USD 150 million, (with export of hi-tech equipment to S.E. Asia, Germany and Switzerland). As Member (Planning Commission) he authored the 'Vision 2030' foresight document in 2007. A Rhodes Scholar, he retired as Chief Scientist from the PAEC in 2005.

^{2.} Pascal Lamy, (July 2004). "The future of the World Economy; What Place for EU Industries?"

^{3.} World Economic Forum, "Global Competitiveness Report, 2017-18."

^{4.} Statistics from UNESCO and the World Bank, 2005; for further reading, please see: www.oecd.org/documents, 2005

^{5.} Federal Bureau of Statistics, 2018

Table 1: Technlogical Readiness and Innovation in Selected Countries

Overall Global Rank, from 137 countries	Pakistan	Turkey	Malaysia	Ireland	India
Overali Giodal Rank, Irolli 137 Countries	114	53	40	23	24
9th Pillar: Technological Readiness	111	62	46	18	107
Availability of latest technology	70	57	35	33	7 2
Firm-level technology absorption	8 8	36	1 7	21	73
FDI & technology transfer	69	61	13	1	59
Individuals using Internet, percent	124	70	32	24	100
Fixed BB Internet subscribers, percent	107	59	75	2 8	105
Int. Internet Band/Width, kb/s per user	119	60	26	22	124
12th pillar: Innovation	60	6 9	22	1 9	29
Capacity for innovation	8 0	74	1 4	19	42
Quality of Scientific Research Institutes	67	100	24	1 9	35
Company R&D	52	69	1 5	20	23
University/Industry R&D Collaboration	63	66	1 1	13	26
Govt. procurement (adv. tech. products)	33	64	4	60	8
Availability of Scientists & Engineers	63	49	7	21	32
PCT Patents, application/million	105	39	40	1 9	63

Key: Best Worst

service economy, without going through a broad and diverse manufacturing phase.

Escaping the Skills Trap in Pakistan

Who will maintain our infrastructure, or efficiently produce more goods, services, or food? How do we produce goods and services which the world trade demands and not export our 'surplus' only?

Pakistan needs to break out of the 'low skills, low productivity, low expectations' trap. The knowledge worker is not necessarily a PhD; what is needed are large

Regarding the scale and quality of research

numbers of people with certifiable, different and higher skills. According to latest available labour force data, 44 percent of the labour force is illiterate while another 32 percent has a mere eight years of schooling. Overall, only 2.5 percent of the 12-17 age cohort is engaged in any formal skills programme compared with 45 percent, 24 percent, and 21 percent for Turkey, Iran and Malaysia respectively.

articles in 2016 compared with nearly 30,000 from Iran and 28,000 from Turkey.6 The situation is worse in the social science and humanities, with only 17 publications in 2016, compared with 366, 120, and 88 from Turkey, Iran and Malaysia respectively.

in physical or social sciences, Pakistan

published about 8,000 scientific research

Technology Management (TM) and Entrepreneurship: Who will be the Agent of Change?

TM has different functions/activities/ technology levels and must be viewed as a complete system. It depends upon the client's profile, whether it is an existing large enterprise, a stand-alone enterprise or part of a cluster, an SME or a new start-up. The new tech-based firms (NTBFS) are an important part of modern economies because of their flexibility and speed of response. However, they all have an intense need for 'changing technology' intelligence, and assistance in viewing competition not simply as a threat, but also as a source of inspiration as is done in the East Asian countries.

Although analysis and study of TM operations in SMEs are generally patchy and informal, there is consensus that the state has a major role in change management, through training, skill development, and technology adaptation, which



Figure 2: Some Pakistani Hi-Tech Products



Laser Land Leveller



Detector Position Monitoring System: 40 laser systems being Installed in CMS at CERN, Geneva



Transporter, 13T

CMS Magnet Feet, ~28T

HMC-3 Fabrications for CMS







Pakistan's first Locally Designed ECG Machine (HW+SW) - CASE

enhance their internal and external efficiencies, and facilitate adoption, and adaptation of improved hardware and processes. It is worth remembering that becoming an entrepreneur involves changing the external environment from one state-without the venture, to another with the venture. This causes a basic discontinuity in the competitive structure of the industry, sometimes leading to an

altogether new industry. Course of action: Revamp TEVTA/NAVTTC and induct technologists in its management instead of bureaucrats.

programme in PAEC, which managed to combine Research and Development (R&D), teaching and production (the latter exceeding PKR 16 billion), with clients in Malaysia, Bangladesh, Germany and Switzerland. CERN has several Pakistani products but the only Pakistani designed and manufactured item is the laser based position monitoring system (40 laser systems are installed in the massive CMS

deployed to transform Pakistan's economy particularly the manufacturing sector. It needs a major re-organisation of its mission and functions.

Areas where the State can be an Efficient Technology Change Agent

a. Pakistan's Power Shortage: Pakistan is extremely short of electric power, and to equal the current per capita electricity in

Malaysia within 15 years would require an outlay of nearly USD 250 billion. This is an excellent opportunity for the state to focus on, as it can help promote manufacturing and re-

industrialisation in Pakistan. Skills, design expertise and technology already exist in Pakistan for manufacturing major modules and equipment, apart from training facilities.

- **b. Electronic Equipment:** Pakistan has over 130 million mobile phones, and the sale of computers and household electric equipment, and solar systems is increasing rapidly. Local development and production of these products would have a farreaching positive impact.
- **c. Agriculture:** Improve water efficiency with well-established practices, and regulating cultivation of water intensive crops for example, rice.

The Government should not be shy to insist on local progressive manufacture of industrial items in the power and electronic sectors. Every country does it. Energy, electronics, biotechnology, ICT and automation, among others, will be the major drivers of growth in this century. It would be useful for a permanent technology foresight activity, coupled with skills development and appropriate tariffs.

Financing Entrepreneurship and Innovation

Innovation requires decent financing and a pool of highly skilled personnel. Most low-tech SMEs can raise some funding from local sources, family and contacts, while hitech enterprises need a dedicated fund in the form of venture capital or angel funding, which operate on strict financial risk analysis. The local ICT sector is quite dynamic in this regard and has established its own niche in the country's service sector and in developing various apps for mobile communication. Larger organisations such as the PAEC⁷ have their own extensive repository of personnel and supporting workshops for manufacture.

This is what transpired with the laser

detector in Geneva). The laser land leveller with sales of over 4000 units in Pakistan, reduces water consumption by 31-37 percent, while increasing yield by 16-18 percent because of uniform distribution of water and fertiliser.

The agent of change for the CASE products is the ICT R&D Fund which touched PKR 40 billion a few years ago, and supports development of products and technology in the ICT sector through small grants for research students. Generally, university-industry linkages are few, and the private sector is slow to innovate.

The Ministry of Science and Technology should play a major role; unfortunately it is quite dysfunctional, with little interest or understanding of how technology can be

7. Pakistan Atomic Energy Commission

The Way Forward

In order to promote technology, entrepreneurship and innovation, the state must be the agent of change. It should undertake the following:

i. Strategic Alliances with Organisations Inside/Outside Pakistan with a

- Internal Technology Transfer from the 'best' to the 'not so good' in Pakistan;
- Match-making for markets and technology;
- Business networking, access to information, credit; and,
- Business trust through better contract enforcement.

ii. Promote Innovation Skills and Backup in:

- Research and tertiary education institutes which include universities, technical training colleges, and R&D institutes;
- Encourage patents and intellectual property rights; and,
- Insist on compulsory courses in social sciences and humanities for scientists and engineers and vice versa; they need to communicate in building social capital.

Brass Astrolabe

Examples of Earlier Technology and Innovation in Pakistan

The Lahore School of astrolabe makers was famous in the 16th/17th Century. This particular brass astrolabe, made by Qaim Mohammad in 1634/5 in Lahore, showed the position of nearly 50 stars and 120 cities from Central Asia to the Mediterranean. There is a table of planets on the back, and mathematical scales for sine, cosine and cotangent. Most important, it had a solar calendar not the Muslim lunar calendar – real entrepreneurship!





iii. Establish a Dedicated Technology Transfer Agency with Funds at its disposal for:

- University industry Linkages/Matchmaking; and,
- Smart tariffs and incentives to promote local manufacture.
- iv. Encourage Interactive Learning through soft infrastructure, social capital etc.
- v. Reassess Benefits from CPEC: Identify the skills needed for power plants, the Gwadar port or the new hydroelectric dams planned across the

country. Language skills are crucial, apart from technical and management skills. This offers interesting prospects for social engineering.

vi. Most importantly, aim for at least 20 percent enrollment in skills which are certifiable and recognised internationally. We only have approximately 300,000 students enrolled in formal skills programmes as compared to nearly 1.5 million in universities.

All these will encourage inclusive growth and create employment.

Opinion

Agriculture and the Role of Rural Economy for Inclusive Growth



CEO, Capstone Consulting International Pvt. Ltd. Pakistan

Former Poverty Policy Adviser, Bureau for Development Policy, UNDP, New York

Former Senior Research Fellow, International Food Policy Research Institute, Development Strategies and Governance Division, Washington DC

Pakistan is a country endowed with abundant natural resources and an enabling climate for agriculture to thrive. Since Independence in 1947, agriculture has been the backbone of the economy driving its growth and development. The sector and its subsectors (crops, livestock and poultry, fisheries and forestry) contributed as much as 40 percent to the GDP in the 1960s and 1970s. Pakistan's agriculture sector outperformed other South Asian countries in the 1970s and 1980s, but has lagged behind since then, and lately, has just become a supporting sector for industry. With a shift in policy focus away from improving agriculture and towards promoting industry and services, the contribution of the sector has declined to around 20 percent of the GDP. The combined share of the industry and the services sector has correspondingly increased to 80 percent. The growth in the sector has also suffered with annual growth rate averaging 3.7 percent in 2000-2010, 2.8 percent between 2010-2014 and 3.8 percent in 2017-18, much lower than the

average of 4-6 percent for earlier years.

Although the contribution of the sector to GDP has gone down, agriculture is still vital to the development of the country's economy, supporting the livelihoods of 63 percent of the population living in rural areas, employing 45 percent of the labor force and accounting for over 70 percent of the country's exports (directly or indirectly) through food, textiles and leather related products. Moreover, the sector has strong linkages with the rest of the economy; it is a supplier of raw material to the industry and the largest market for industrial manufactured goods like pesticides, fertilizers, tractors and agriculture equipment. Pakistan's rural non-farm economy also generates substantial output and employment through a variety of enterprises consisting of small village shops selling everyday consumables, repair shops, transport services, small scale rural processing etc. Estimates in the 2000s indicated that non-farm incomes were 40-58 percent of total rural household income.¹ Even farmers engaged in agriculture earned 36 to 51 percent of their incomes from non-farm rural sources.

Agriculture's role as providing a base for industrial development has long been recognized in developing countries like Pakistan. But more recently this role has been transformed to one of providing food security, promoting inclusive growth and reducing poverty, fostering gender equality and helping in managing the environment. Today, no progress on SDGs is possible in developing countries, without the contribution of agriculture and the rural economy.

Inclusive growth has been the focus of international attention since the year 2000. It means that majority of people participate, contribute to and benefit from growth. In the agriculture sector, inclusive growth would mean more employment and higher incomes for the marginalized rural poor and women living below the

poverty line, who have often not benefitted from higher economic growth. In most developing countries, the poor live in rural areas and work in agriculture, therefore growth in the sector is likely to be inclusive. In Pakistan, agriculture can also be a key driver of inclusive growth and poverty reduction as 80 percent of the poor live in rural areas and derive their livelihoods from agriculture. Poverty estimates also show that rural poverty is much higher (30 percent) than urban poverty (12 percent).²

Research and empirical evidence from several countries has shown that growth in GDP originating in agriculture reduces poverty more than growth in other sectors. In African countries (excluding Sub-Sahara Africa), growth in the agriculture sector reduced poverty five times more than growth in the non-agriculture sector. In Sub Sahara Africa, agriculture has been 11 times more effective in reducing poverty than the other sectors.3 Evidence has also shown strong poverty reduction effects of agriculture in other parts of the World with a one percent increase in GDP from agriculture resulting in more than 6 percent increase in expenditures of the poorest deciles.

Policies: The Past and the Future

There is no dearth of policies designed to promote the agriculture sector in Pakistan. The issues and challenges facing the sector and recommendations for its growth and development have been repeatedly documented in the various policy documents (National Agriculture Policy 1980, Report of the National Commission on Agriculture 1988, The National Agricultural Policy 1991, The Agricultural Perspective and Policy 2004 (not formally adopted), Framework for Economic Growth 2011, National Food Security and Agriculture Policy 2017). These documents show the focus of agriculture policies over the years. In the earlier years, the emphasis was on increasing yields of major crops, land reforms and governance while more recently, focus has shifted to food security,

^{1.} Australian Center for International Agriculture Research, "Pakistan Agriculture Challenges, Policy Interventions and ACIAR's Policy Research." Available at https://www.pide.org.pk/pdf/Seminar/Pakistan-Agri-sector.pdf

^{2.} Government of Pakistan, "Pakistan Economic Survey 2017-18". Available at http://www.finance.gov.pk/survey_1718.html

UNFAO (2012), "Contribution of Agricultural Growth to Reduction of Poverty, Hunger and Malnutrition." Available at http://www.fao.org/docrep/016/i3027e/i3027e04.pdf

nutrition and diversification.

Policy performance in practice has been mixed in meeting its objectives. For instance, policies under the second five-year plan (1960-65) and Green Revolution of promoting modern inputs and technology, stabilizing markets with procurement pricing, investing in irrigation and infrastructure and agriculture research and extension; were effective in increasing growth in the sector. Average agriculture growth was recorded at 4 percent in the 1960-65 period and 6.3 percent between 1966 and 1970.

Various attempts at land reforms (1959, 1972, 1977) have not been very effective in limiting maximum size of landholdings. Policies to govern water allocation were successful in the earlier years but have not been effective in dealing with the persistent problems of inadequate storage, losses and low water productivity. Development of institutions to improve coordination and policy effectiveness (e.g. National Agriculture Prices Commission, Pakistan Agriculture Research Council,1981) have been partially successful in achieving their objectives.

Agriculture in Pakistan has an enormous potential to grow and drive inclusive growth, but the government needs to learn from local and international experiences, do away with conventional policy practices and introduce major policy reforms to tap this potential. Strategies and recommendations in the past have been elaborate but failed mainly because of a lack of matching financial allocations in the budget, absence of monitoring and implementation plans, and lack of integration of agriculture policies with overall policies.

Policy focus in the past has been on major crops but demand for these is declining, while that for other crops and livestock has been rising regularly. The world in which agriculture operates has modernized and

changed. Tightly coordinated supply chains have come up which have transformed agriculture markets. Policies must be modified to accommodate these changes. It is recommended to take focus away from major crops and diversify into more high value crops; promote livestock and rural off farm enterprise activities to meet the changing demands of the national and international markets. CPEC presents a unique opportunity to capture the Chinese food market as China imports over USD 500 billion of food items every year. The Indus Basin corridor of CPEC has potential for crop diversification, which should be explored further. Lessons can be learnt from South Africa, Indonesia, and other South Asian and African countries which have developed their agriculture sectors through crop diversification and promoting livestock and agribusinesses.

Policies in the past have failed due to a lack of resources. Not only substantially, more resources will have to be committed to back the reforms agenda, but clear investment priorities will have to be set. Funds will have to be diverted by reducing expenditures on domestic procurement storage and distribution of wheat, and reducing subsidies on sales of government wheat to flour mills and the fertilizer industry.

This would specifically require:

- Greater expenditures to improve productivity and yields (specially of the small farmers) and to deal with climate change;
- More investments in research and extension not only to enhance productivity and yields, but also to improve resilience to floods, weather changes and pests and diseases;
- Intensifying dissemination of knowledge and practices to farmers across the country and regulating the seed market for better dissemination of improved practices;
- Major investments in water storage and

- distribution, including canal rehabilitation and maintenance, which will improve the availability of water, minimize the devastation from floods and improve the efficiency of water use;
- Prioritizing investment in infrastructure (electricity, transportation, cold storage);
- Promoting high value addition to build modern and efficient supply chains for agriculture and livestock; and,
- Providing stronger incentives to the private sector to invest in rural infrastructure and research and extension.

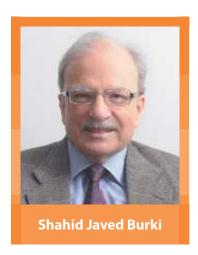
In addition to the above, Pakistan will have to better manage its water resources, develop institutional capacity, coordinate and integrate polices at different tiers of the government. This will entail:

- Managing the water resources more judiciously, testing feasibility of high efficiency irrigation systems, increasing water use efficiency though appropriate water pricing and developing a National Water Policy;
- Strengthening agriculture against weather shocks and climate change by developing institutional capacity to anticipate the dangers and plan ahead;
- Encouraging provinces to develop their agriculture policies in coordination with the federal ones, following the 18th Amendment; and,
- Ensuring integration of provincial policies with national agriculture policies and agriculture policies with other policies.

In conclusion, inclusive agriculture growth can only be possible if policies address the issues and constraints faced by the agriculture sector, adequate resources are allocated, plans are closely monitored, and policy makers are committed to back policy reforms and their subsequent implementation

Opinion

Industrial Policy: Challenges and an Opportunity to Promote Inclusive Growth



Former Vice-President, World Bank De facto Finance Minister of Pakistan Senior Economist

The Census of 2017 had a number of surprises for Pakistan's policymakers. The country's population was larger than the government had anticipated -- about 210 million rather than 180 million. The rate of population growth was at 2.4 percent rather than 1.8 percent. Real GDP growth was above four percent in 2013-14 and smoothly increased to reach 5.28 percent in 2016-17, which is the highest in 10 years.² Some five million people were entering the work force every year; of these slightly less than one-half were in the urban areas. However, Pakistan, has yet to mature into the phase of demographic transition. The policymaking community needs to factor this information in coming up with appropriate economic, political and social policies. Policymakers should focus on generating employment not only for fresh entrants to the workforce, but also for those who are already employed. As discussed in this essay, public policy needs to give greater attention to developing small manufacturing enterprises (SMEs), based on using domestic resources and encouraging them to enter the rapidly developing global supply chains that are changing the structure of global industrial production.

At the time of its birth in 1947, Pakistan was

mostly an agricultural economy. The industrial sector was made up almost entirely of small-scale metal and wood working manufacturing enterprises. There were only two mills in the large-scale manufacturing sector (LSM); one in textiles and the other in cement.

Seventy-one years later, industry is one of the economy's main sector accounting for nearly 20.9 percent of the gross domestic product.3 It can be divided into three distinct components: the LSM sector that produces 79.7 percent of the total industrial output; the SME sector that accounts for 13.8 percent and the slaughtering industry⁴ that contributes the balance, 6.4 percent. The structure of the country's industrial sector is the consequence of public policy which impacted it in several distinct ways. The effect of the past on the present is something economists call "path dependence." Before providing the main elements of the strategy, a brief discussion on the approaches adopted in the past, is requisite.

The Beginning (1947-58)

At the time of Pakistan's birth in 1947, agriculture dominated the Pakistani economy. About one-half of the national product originated in the sector and the bulk of the labor force was employed in it. Agricultural products dominated exports: Pakistan was the major supplier of raw cotton to the textile mills in Ahmedabad and Mumbai. The prominence of agriculture in the economy was the consequence of public policy. In the late nineteenth and early twentieth centuries, the British colonial administration operating out of New Delhi was worried at the possibility of political unrest because of the persistent food shortages in eastern parts of the British Indian Empire. The Great Indian Mutiny of 1857 was still fresh in the minds of those who governed. To come up with a strategy, London set up the Royal Famine Commissions. The Commissions concluded that it would be very costly to import food grains from the food-surplus parts of the Empire. Also, the timely delivery of food could not be ensured. The other approach would be to develop the areas within India that could, with appropriate public investment, produce food-grain surpluses to feed the food-deficit areas. There were large tracts of virgin lands in Punjab and Sindh that could be brought under cultivation by tapping the used but copious supply of water in the rivers of the Indus system. Large investments were made by the government to construct a system of surface irrigation and very quickly these two provinces became the granary of east India. To transport the food surpluses, the government also built a large network of roads and railways linking Punjab and Sindh with Bengal, Bihar and Orissa. At the time of independence, what became West Pakistan, was closely linked with the economy of the rest of India as a supplier of unprocessed agricultural products to more industrialized parts of the sub-continent.

There is no doubt that this structure of the sub-continental economy would have remained in place had India not adopted a set of policies that changed the established structure. Upset with the Pakistani decision not to devalue its currency with respect to the American dollar as was done by all countries of the British Commonwealth, New Delhi decided to stop all trade with Pakistan. This one move by the Indian authorities was to have enormous consequences for the development of the Pakistani economy. It began the process of industrialization, with the government giving emphasis to the private sector to set up industries producing consumer goods. The government, having become preoccupied with the need to produce items of daily production, thereafter neglected the agriculture sector. The rate of increase in agricultural output declined to merely one percent a year during the first postindependence decade.

This had consequences for employment and urbanization. With jobs in the countryside not increasing to match the rate of growth in population, there was large-scale migration to Karachi, which had become

 $^{1. \}quad Ministry of Finance, \\ \text{``Pakistan Economic Survey 2016-17, Overview of the Economy.''} A vailable at \\ \text{http://www.finance.gov.pk/survey/chapters_17/overview_2016-17.pdf} \\ \text{Iterates a survey of the Economy.''} A vailable at \\ \text{http://www.finance.gov.pk/survey/chapters_17/overview_2016-17.pdf} \\ \text{Iterates a survey of the Economy.''} A vailable at \\ \text{http://www.finance.gov.pk/survey/chapters_17/overview_2016-17.pdf} \\ \text{Iterates a survey of the Economy.''} A vailable at \\ \text{http://www.finance.gov.pk/survey/chapters_17/overview_2016-17.pdf} \\ \text{Iterates a survey of the Economy.''} A vailable at \\ \text{http://www.finance.gov.pk/survey/chapters_17/overview_2016-17.pdf} \\ \text{Iterates a survey of the Economy.''} A vailable at \\ \text{http://www.finance.gov.pk/survey/chapters_17/overview_2016-17.pdf} \\ \text{Iterates a survey of the Economy.''} A vailable at \\ \text{Iterates a survey of$

^{2.} Ibid

^{3.} Supra 1

 $^{4. \}quad \text{'Slaughtering'} \ \text{is a standard economic term referring to the killing of animals in slaughter houses for producing animal products}.$

the hub of new industry. As a result, Karachi exploded in size and was termed an "instant city".⁵

Private Incentives (1958-69)

The eleven year period during which General Ayub Khan governed Pakistan can be regarded as the golden era of the Pakistani economy. The rate of GDP growth more than doubled compared to what the country was able to achieve in the first decade after independence. The turnaround can be attributed to the making of public policy. Experts were called in from Harvard University's Development Advisory Service to beef up the expertise of the Commission. Some of them labeled Pakistan as an economic success and suggested that the country could serve as a model other developing nations could follow. ⁶

Encouraging private enterprise was the most important element of this model; the private sector flourished in both manufacturing and agriculture. Ayub Khan laid the basis for the 'green revolution' in the country with the adoption of new technologies which brought about a significant increase in food output. The economic success during the Ayub era is debatable. While some analysts say that the incidence of poverty declined and the distribution of income improved, economists like Dr. Mahbub UI Haq, the then Chief Economist, pointed out to the concentration of wealth in the hands of a few industrial houses.⁷ His critiques have challenged his analysis stating that the proportion of income going to the highest 20 percent of the population had declined by 3.2 percentage points during the Ayub Khan period-from 45.2 percent to 42 percent-while the share of the poorest 20 percent had increased by 1.8 percentage points-from 6.4 percent to 8.2 percent. The ratio of the highest to the lowest declined by two percentage points, from 7.1 to 5.1.8 Nonetheless, the speech contributed to the fall of Ayub Khan and the rise of socialism in Pakistan.9

Turning Towards Socialism (1971-77)

Prime Minister Zulfikar Ali Bhutto brought socialist thinking to the management of the economy. Not being an economist, he misread the contributions the public sector had made in the Soviet Union and across the border in India, to GDP growth and income distribution. He was convinced that

he needed to expand the presence of the government in the economy to deliver on the promise he made to the electorate that put him in office. In 1970, he and his new political party, the Pakistan Peoples Party (PPP), won the election by promising 'roti, kapra, and makan' (food, clothing and shelter) to the electorate. Unlike India that had built a large state presence in the economy by investing in heavy industry under the control of the public sector, Bhutto took a short cut. He expropriated large enterprises in the sectors of industry, finance and commerce to put more resources in the hands of the government. A couple of years after the nationalization of large enterprises, his government took over the SMEs in the food processing industry. The motive behind the second nationalization was not economics but politics. Since large farmers had invested in food processing industries, by taking over their control, Bhutto was able to increase his political influence on this segment of the population.¹⁰ These policies reversed the private incentives on the basis of which General Ayub Khan had built economic success. Rather than helping the poor and increasing employment and wages, Bhutto's economic policies had the opposite consequence. The incidence of poverty increased during the Bhutto era and contributed to the return of the military to the center of the political stage.¹¹

Recovery from Flirtation with Socialism (1977-88)

Pakistan made an attempt to do away with the flirtation with socialism after Bhutto was removed by the military and the economy was put under the charge of the bureaucracy. An effort was made to revive planning to guide both the public and private sectors. But the country came to be preoccupied with the situation created by the occupation of Afghanistan by the Soviet Union.

Directionless Development (1988-2018)

This long, forty-year period in Pakistan's development as a nation provides testimony to the fact, that there is a direct and close relationship between politics and economics. Daron Acemoglu and James Robinson-the first an economist and the other a political scientist-came to the conclusion that an inclusive economic order is possible only if it is supported by an inclusive political system.¹² The Ayub Khan

period was an effort to create inclusive economic development by founding what he called the system of 'basic democracies'. This was the system that was supposed to support economic growth by mobilizing the poorer segments of the population. The effort was felled by politics; those who opposed the military leader argued that his political system was not really inclusive. Since 1988, when Pakistan lost Zia ul Haq, the country has struggled to create an inclusive political order. It appears that the elections of 2018, may finally give the country a political system that would be reasonably representative of most segments of society. If Pakistan does move forward politically, this would be the right time to bring back economic strategizing.

Speeding up Economic Growth, Increasing Employment and Reducing Poverty

Pakistan has a number of opportunities that can produce inclusive economic growth. Three need to be noted: the extraordinary potential of the underused or poorly used agriculture sector, the country's location which gives it tremendous opportunity to become the hub of land-based and trans-continental commerce, and China's interest in making it a central player in its 'belt and road initiative' (BRI). In fact, a strategy for promoting economic progress can use all these factors so that they become mutually supportive. This was the theme put forward by the Lahore-based Burki Institute of Public Policy.¹³ The Institute is doing further work in the area and is developing a program that would incorporate the development of the SME's in the golden triangle formed by Lahore, Gujarat and Sialkot that could become a supply-chain hub for China's large industries, in particular the automobile sector. Also, livestock and agriculture could be developed in Pakistan's eastern and northern parts to supply food to the western parts of China. Beijing is now pursuing a new approach to economic development that would involve shifting people from crowded parts along the east coast to the sparsely populated provinces.14 These new comers to the area would need food that cannot be produced locally since not much land is available there that is suitable for agriculture.

Pakistan's success in embedding its development strategy in the BRI would

- 5. Steve, Inskeep (2012), "Instant city: Life and Death in Karachi", New York, Penguin Books.
- 6. Gustav F. Papanek (1968), "Pakistan's Development: Social Goals and Private Incentives", Cambridge, Mass., Harvard University Press.
- $7. \quad \text{The '22 Families' Speech. For further reading, visit $$https://mhrc.lums.edu.pk/speeches-dr-mahbub-ul-haq} \\$
- 8. Parvez Hasan (1998), "Pakistan's Economy at the Crossroads: Past Policies and Present Imperatives", Karachi, Oxford University Press, Table 1.14, p. 61.
- 9. Shahid Javed Burki (1986), "Pakistan: A Nation in the Making, Boulder", Colo. Westview Press.
- 10. See Shahid Javed Burki (1980), "Pakistan under Bhutto, 1971-77", London, Macmillan.
- 11. Shahid Javed Burki and Craig Baxter (1991), "Pakistan under the Military: Eleven Years of Zia ul-Haq", Boulder Colo., Westview Press.
- $12. Daron Acemoglu \ and \ James \ A. \ Robinson \ (2012), "Why \ Nations \ Fail: The \ Origins \ of \ Power, \ Prosperity, \ and \ Poverty", \ New \ York, \ Crown \ Business.$
- 13. The Burki Institute of Public Policy (2018), "The State of the Economy: China-Pakistan Economic Corridor". Available at http://www.sjbipp.org/publications/AR/reports/AR-10-17.pdf

encourage Beijing to press on with this initiative. According to some reports in the western media, while "China has spent nearly five years steering an ever-growing stream of hundreds of billions of dollars to a bold plan to gain greater global influence

by funding big projects across Asia, Eastern Europe and Africa, Beijing is starting to tap the brakes." While this may be the case, the China-Pakistan Economic Corridor program of multi-sector development that is under implementation, would not be

affected if Islamabad makes the right moves by coming up with a new growth strategy aimed at achieving sustainable and inclusive development.

Interview



Dr. Shahbaz Khan

Managing Director
Khyber Pakhtunkhwa Information Technology Board (KPITB).

In your opinion, is technology an enabler or disabler?

Technology is definitely an enabler, however there are certain prerequisites that need to be met. Digital literacy, being the only way to extract dividends form the digital space, is the first step in identifying the gap in digital skills and then devising a complete plan to impart these skills. The youth must also be sufficiently skilled and empowered to decide on the most appropriate digital skills to enable growth, striking a delicate balance between investing in proven capability available today and trying to predict what might just be over the horizon.

These skills provide numerous ways to add to the digital economy. Through our digital skills initiative, we learned that our province produces an average of 6000 IT graduates annually with only 2000 conventional job opportunities available to them. To counter this imbalance, there was a dire need to think out of the box and tap into the freelance market. These platforms publish reports entailing skills that remain high in demand in their previous operational year. These skills were included in the digital skills initiative of KPITB and master trainers were hired who would provide in-class training to 40,000 under-and-un-employed youth of the province. As of now, we have almost 10,000 trained youth and more than 35,000 applications remain un-answered. This reflects the interest of the youth in digital skills, despite hailing from the most remote areas of the province, thereby assuring that technology is an enabler of growth.

What in your view, are the drivers and opportunities of inclusive growth in Pakistan?

In a connected and smart society, digital transformation has become one of the key strategies governments are adopting to promote inclusive growth. Digital transformation cannot happen in silos; a collective effort from several stakeholders is required at the institutional level to trigger inclusive growth. This is what KPITB strives to achieve through its initiatives under four focus areas; Digital Governance, Digital Economy, Digital Skills and Digital Access.

Digital Governance works on employing technology to make government institutions and processes more transparent and efficient through automation. Digital Economy works to enable the marginalized community to become a part of the digital dividends and support entrepreneurs. Digital Skills aims to equip youth with the skills of the future for digital transformation. Digital Access paves ways to scale up infrastructure for the provision of reliable and affordable connectivity in the province.

say that again

"Digital literacy...being the only way to extrac dividends form the digital space, is the firs step in identifying the gap in digital skills and then devising a complete plan to impart these skills."

The four pillars of KP's Digital Strategy are the manifestation of a detailed gap analysis, stakeholder engagement, input from expert advisory groups and analysis on available data to bring about an effective, successful and sustainable digital transformation in the province.

How can the private sector be a more active player in promoting inclusive growth and sustainable development?

The private sector is indeed an engine of growth. Their undeniable role in creating employment opportunities strengthens their pivotal role in promoting inclusiveness and sustainable development. However, this transformation may only be possible if different stakeholders join hands on a single platform. For instance, youth holds great potential both in terms of capacity and number, hence



can be our greatest asset if properly channelized.

KPITB is also establishing Pakistan's first digital city that will provide a complete IT based ecosystem for the private sector to invest in the province and create a hub for all tech based businesses.

What pro-poor public policies are required to set the country onto a path of economic prosperity and growth?

KPITB's current initiatives are aligned with 11 out of the 17 Sustainable Development Goals. Unlike other agencies, we have a presence at the very grass root level in every district. Our initiatives are designed to alleviate the marginalized segments of our community and incorporate minority segments through the process.

As provincial government institutions are more aware of ground realities, the federal government should empower the respective provincial governments and give them autonomy in public matters.

Are there any national or international models that the country can adopt for enhancing growth patterns and making it more inclusive and all-participatory?

One size does not fit all. True digital transformation is the enabler for inclusive growth as well as financial inclusion. Our focus is on enabling digital payments at the national level, which can open gateways to many opportunities for financial inclusion-China and the European Union being the best examples in this connection. If we talk about Digital Governance, Estonia comes up at the top, their digital governance model has seen a lot of success and can prove to be a good candidate for replication at the national level.

Our struggle to eliminate the digital divide through Digital Skills incorporates and addresses all segments of society and builds the foundation of inclusive growth. Working on individual sustainability will eventually lead up to sustainability at the community and national level, and this is our priority.

Interview



Shandana Humayun Khan

Chief Executive Officer
Rural Support Programmes Network (RSPN)

What, in your view, are the drivers and opportunities of inclusive growth in Pakistan?

The real drivers of change are the people of this country but a change can only be achieved through collective effort. This is the mantra that RSPN works on as well-social mobilization and social organization. It works on mobilizing people at the village level and federating the institutions upwards. And it is these institutions that we want to link to the local government so that poor people can access services and the government can be more accountable.

The key area of intervention for inclusive growth should be a targeted poverty reduction policy. We have worked very closely with the Sindh and KP governments and seen success, especially with the Sindh government, regarding including in its policy that community institutions must work with local governments as a formalized system. This is a huge step for the communities and the government. Of course this hasn't happened overnight- our RSP's have been operational for over 30 years now. So such forums that allow the government to deliver through and help improve basic service delivery, are key drivers for any sort of growth to take place.

One good thing about such people organizations is that there are checks and balances. Even though there are proper audits and accountability mechanisms, however the people themselves form the biggest instruments of accountability. Also, all financial dealing is done with an entire group hence that itself eradicates chances of corruption and financial embezzlement.

Gender inclusivity is also an integral component of uniform inclusive growth. RSPN takes this very seriously and there is a deliberate effort to include women in all these community mechanisms.

What issues/barriers exist in Pakistan, with regards to institutions and practices, that hamper inclusive growth in the country? How can these be overcome?

If looked overall, political will offers the biggest challenge. Political commitment is key in taking these programs to a macro level. The local government does not seep down to the poorest level hence these complementary structures are then aiding the government, but only if the latter's will is involved.

Financial resources are another challenge. The local government does not house sufficient development budgets. We have seen that community donations provide a lot of support to the sustainability of these interventions, in which the government also then adds a share.

say that again

"...The key area of intervention for inclusive growth should be a targeted poverty reduction policy."

Financial sustainability is key. So how does a local support organization sustain itself? We have found that one of our interventions, the Community Grant Fund, which we grant to the LSO, is one way that the operational costs are sustained. Moreover, in certain areas, people are also giving a very minimal membership fee from their own saving, so people themselves are also coming forth to support the cause. So, in essence, RSPN is building community institutions and our challenge is to ensure their financial sustainability. And we found that through these revolving funds, through members' donations, through links with local government and other entities, many of these have sustained.

How can the private sector be a more active player in promoting inclusive growth and sustainable development?

One model that has been successful, has been when you work with communities on micro level enterprises. The bigger private sector is very important in this entire model. They can work with these communities. This is key because for people to be able to market their products, is important to ensure sustainability.

Access to finance is also a sector where the private sector is already very active. The National Rural Support Program has begun to venture into that field also.

What pro-poor public policies are required to set the country onto a path of economic prosperity and growth?

The government needs to work in unison with all instutitions that are offering basic services to the people. We cannot expect our country to work on the lines of any developed country as the dynamics are completely different. The communities and the government both need to work together, and then come the policies. For instance, India has translated our very model into a policy at the national level.

Are there any national or international models that the country can adopt for enhancing growth patterns and making it more inclusive and all-participatory?

We have a very good model. The five countries in SAARC have learnt from our model. There have been numerous evaluations done on various fronts. India has added this as part of their policy. An important aspect of this model is the young people who come to work with us. This model also takes into account local conditions and adapts accordingly. So, it is a great model to build on. Of course, there is always room for improvement, however, we should expand this model and adapt it throughout the country.

Interview



Nadeem Javaid Former Chief Economist

Ministry of Planning, Development and Reform

What, in your view, are the drivers and opportunities of inclusive growth in Pakistan?

The World Economic Forum last year recognized that growth in Pakistan is inclusive. During the last five years, the rate of economic growth in the country has been able to alleviate the situation in terms of poverty, from 29.5 percent to 24 percent.

However, the issue is not about inclusivity. The rapid population growth i.e. 2.4 percent, is a major challenge for economic growth. No country has witnessed improvement in living standards with this rate of population growth. Nevertheless, one positive aspect for Pakistan is that although economic growth has been below its historical performance since 2008, yet it has been more inclusive with better distribution mechanisms as per the Gini coefficient. The Benazir Income Support Programme (BISP) is a major player in this regard as the government increased budget allocation of BISP from PKR 47 billion in 2012-13, to PKR 121 billion in 2017-18. Similarly, number of beneficiaries has increased from 1.8 million to 5.6 million in a decade.

However, there is a need to make growth even more inclusive. I strongly believe, this can be achieved by focusing on the agriculture sector. Without improving the terms of trade for farmers, robust and inclusive growth cannot be achieved.

Likewise, rural and urban areas require different interventions. But if Pakistan is to improve the rate of inclusive growth, then focus needs to be on the uplift of rural areas. Majority of the population abides in these areas and the rural enterprises (such as cottage industries) are entirely missing from our economic landscape. By integrating these rural centers to urban or peri-urban areas by having better connections vis-à-vis supply chain management, an atmosphere that is conducive for rural enterprises can be created.

Social safety nets are a very important aspect. Those on borderline poverty cannot tolerate any unexpected shocks. In such a situation, solutions such as cash transfers etc cannot work. This is where social safety nets offer a solution. They act as fall backs in such unfortunate unexpected events. Examples of social safety nets include interventions such as the Prime Minister's Health Insurance Programme and a few same offerings by provincial governments.

I would also emphasize, that skill and capacity building of the vulnerable houses a lot of potential in making them agile and self-

say that again

"...If Pakistan is to improve the rate of inclusive growth, then focus needs to be on the uplift of rural areas."

sufficient. The Prime Minister's 'Hunarmand Pakistan Programme', several internship programmes and interest free loan schemes are important interventions of the federal and provincial governments. These efforts should be acknowledged and appreciated. Such interventions and social safety nets in the absence of proper built in stabilizers, act as support mechanisms for inclusive and broad-based growth.

Access to finance is another very important aspect in improving inclusive growth. Although cellphone and internet penetration apart from easy cash transfer facilities and branchless banking are getting traction, yet the transaction costs are high. Such mechanisms for financial inclusion should further be strengthened and the government is already working on this front with central banks and IFIs.

What issues/barriers exist in Pakistan, with regards to institutions and practices, that hamper inclusive growth in the country? How can these be overcome?

There is a need to further improve redistribution mechanisms as far as fiscal policies are concerned. BISP is doing very well, but is only catering to a small segment of society. There are a number of people engaged in economic activity but are not effectively employed-'disguised employment'. So this imbalance needs to be corrected.

The gap between planning and execution is huge, especially when it comes to softer interventions. This is a great challenge because implementing agencies/agents do not understand the intricacy of these interventions.

Transparency is also a challenge. Mechanisms to strengthen transparency are required, and a continuous watch on these is important through regular accountability and audits.

Finally and most importantly, awareness on rights needs to be created. Considering a large proportion of the workforce is working informally, rights are easily violated. Hence, it is important that there is proper awareness so inclusivity can be practiced in the true meaning of the word.

How can the private sector be a more active player in promoting inclusive growth and sustainable development?

Job creation can only be possible in the private sector, public sector

is on an austerity drive since the last few decades. Industrialization is an opportunity that the private sector can be involved in.

Providing financial resources is not the domain of the private sector. However, they can develop interventions such as internships for youngsters in far flung areas or partnerships with vocational training institutes etc. They can help foster an environment of entrepreneurship and serve as a catalyst for change. The private sector can also play a huge role in creating awareness and conducting trainings to make the youth employable under their Corporate Social Responsibility initiatives. However, it is not a one-way street: the government should recognize these efforts of the private sector while giving them tax credits for performing such activities in the economy.

What pro-poor public policies are required to set the country onto a path of economic prosperity and growth?

You do not need to reinvent the wheel: things are already in place, however, efforts are required for proper implementation besides enhancing the efficiency and efficacy of public expenditure. With poverty showing declining trends over time, the country is on the right track.

In going forward, the issue is that while growth is happening and is inclusive, however, inequality is rising as well. Inter provincial disparities and inequalities need to be addressed through tweaking policies and it should be kept in mind, that these changes will take time to gain momentum and deliver results.

Are there any national or international models that the country can adopt for enhancing growth patterns and making it more inclusive and all-participatory?

We need to appreciate the diversity we have in this country: every province has its own idiosyncrasies- one standard policy cannot suit every province/district. Hence, following similar policy models whilst adapting them to each area, would be a good way forward. Rural enterprises should especially, be made part of policy planning and development.

One thing is very clear: when it comes to emulating something in Pakistani settings, the focus needs to be around social safety nets, education and health and nutrition. Policy response should be designed in a way that these core sectors are addressed.

Interview



Tahira Raza

Former President First Women Bank

What, in your view, are the drivers and opportunities of inclusive growth in Pakistan?

Discrimination is the worst enemy of sustainable progress. The real driver of sustainable growth lies in inclusivity. A logical and just mindset that believes in equality and equity across the population, is critical for sustainable growth. Inclusion of maximum adult workable population, especially women, who are the largest excluded segment of population in the work force, is the key driver of sustainable development. Pakistan is sitting on a big youth bulge which is a big opportunity. The adoption of the Sustainable Development Goals (SDG) at the national level is a promise in the right direction.

With regard to women's financial inclusion and empowerment, several steps have been taken at the national level by the government and regulators. Awareness that inclusion of women in the decision making process brings commercial and economic value is gaining popularity. This is a major incentive to provide opportunities to women and other marginalized segments.

However, the visibility of implementation mechanisms is still far from sight, despite establishment of a separate SDG unit in the Planning Divisions.

What issues/barriers exist in Pakistan, with regards to institutions and practices that hamper inclusive growth in the country? How can these be overcome?

Missing or grossly lacking enabling environment, a lack of clarity of goals, lack of openly defined policies and elaborate stepwise procedural guidelines for implementation of policy, are challenges. Clarity of roles and responsibilities of each stakeholder and well-defined monitoring and implementation controls to ensure enforceability, are requisite.

Relevant research/studies and data on population segments covering multiple dimensions at the national, provincial, district, town and union council level should be made available. This data must be used to define and prioritize both short and long term goals.

Setting aside budgets and devising stepwise procedural guidelines for policy implementation is the way to move forward. Implementation plans must be time bound with inbuilt controls and output measurement standards. If required to enhance enforceability of the policy, changes via legislation should be done.

How can the private sector be a more active player in promoting inclusive growth and sustainable development?

The role of the private sector can be made more participatory and its

say that again

"...Implementation plans must be time bound with inbuilt controls and output measurement standards."

involvement enhanced by giving it the choice to adopt one or more of the Sustainable Development Goals and devise innovative programs to achieve the defined objectives. Tax incentive may be used as a motivational tool if the project is replicable/scalable. We don't even need separate budgets to do this, as the development funds set aside for direct social or development intervention can compensate for the tax rebate.

What pro-poor public policies are required to set the country onto a path of economic prosperity and growth?

Apart from minimum wages, employers must be made responsible for education, health and trainings to enhance their capacity to perform. Those who sincerely and successfully implement such programs must be recognized at the national level, and may be given citizenship awards. It can also allow tax rebates.

Charity based organizations must also come under this policy umbrella and must feel free to choose goals but must follow pre-set global standards.

What national or international models can the country adopt for enhancing growth patterns and making it more inclusive and all-participatory?

In my opinion, Malaysia, Siri Lanka, Bangladesh, India etc. have invested a lot in human capital in recent years for equality of income distribution, improvement in education, mainstreaming women and other marginalized segments. This has resulted in improved development indicators such as women employment rate, growth in GDP, per capita income, child mortality rate etc., at the global level.

Development goals including the SDGs must be incorporated in the performance KPIs of the public and private sector organizations, with their tax rates linked to the impact/results shown. Organizations will translate their goals in individual KPIs. The standard for measuring performance on these indicators must be standardized across the board, with clear and measurable objectives.

Projects that offer facilitation to women in their traditional roles, through for instance, setting up daycare centers both for children and elderly, would give a huge boost to women employment. Such centers should be set up on a commercial basis under a well-defined charter. A national policy for flexi hours and working from home must be formulated.

Youth Voices

Faridun Gogal

25 Years

A spirit of entrepreneurship has to be inculcated right from the early school years in order to create more job providers than job seekers for a vibrant economy.

Public funds are insufficient to cover the amount of efforts required. Hence, the time is ripe for non-government organizations, corporates and philanthropists etc to contribute towards bigger efforts in making the youth engaged, employable and inclusive in creating a balanced economy that is sustainable and inclusive.

Diyar Khan 23 Yea

To reach the 2030 Sustainable Development Goals and end poverty, global collaborations are important. We must work together in every country to build economies that include and benefit everyone-the poor, minorities, women, and the young people.

Imran Khan 26 Years

It is crucial for the government to work towards innovative solutions to bridge the growing disparities between cities and rural areas, where a large part of the youth live and work.

Aghala Asfand 20 Years

The SDGs are a universal agenda for 'transforming our world'. To achieve this transformation, the government must rethink the approaches of the MDG era, which left youth out of the process.

Haider Shahzad

Hiba Qazi

27 Years

25 Years

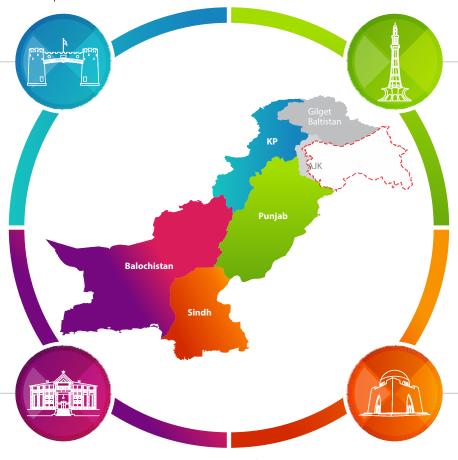
Pakistan is an agro-based economy. Hence, agricultural productivity needs to be improved through better infrastructure and production techniques. Young farmers should be trained on business development and marketing skills.

Salman Arif 29 Years

Inclusive growth is not just about the economy flourishing. It is about the path to reach that point. This can only be achieved if all segments of the society are involved in planning. This would include minorities, disable persons, women and youth.

Saima Yousaf 24 Years

Youth-led organizations and networks should be supported and strengthened, because they contribute to the development of civic and leadership skills among young people, especially marginalized youth.



Roushen Sabzal

Access to finance and social protection are crucial elements to enable youth, especially rural youth, to become entrepreneurs and launch small and medium enterprises in the agriculture sector as well as in non-farm activities, which have the potential to create jobs for youth in rural areas.

Haybat Ullah 28 Years

One of the sustained long term ways of addressing poverty and promoting inclusive growth, is enhancing youth skill development. Vocational training goes a long way as it can be used to earn livelihood, assist others and even invest for future use.

Obeida Saniha 21 Years

If inclusive growth is to be practiced, then a significant step is to first reduce the rural and urban gap, especially in educational infrastructure and attitudes to education.

Jaffar Jahangir 28 Years

In addition to bringing fresh perspectives, young people often have direct knowledge of and insights into issues that are not accessible to adults. They can offer fresh ideas and alternative solutions. And that's an important step in inclusivity: innovation in thinking.

Safia Sanaullah

22 Years

The first step is to create a support system for efforts that foster human capital accumulation and job creation.

Aleena Taqee

26 Years

Young people are change-makers. They have the power to act and mobilise others. Youth activism is on the rise the world over, bolstered by broader connectivity and access to social media. They can utilize these tools to promote sustainable development.

Maaman Qadir

22 Years

Generating employment and ensuring no one is left behind is at the heart of inclusive growth.

Khureed Zabeeh

23 Years

Everyone talks about creating opportunities and spaces of and for inclusivity. However, no one ensures that all these 'dream plans' are even sustainable! Make growth plans that are sustainable, not those which run on exhaustible resources.

DEVELOPMENT ADVOCATE PAKISTAN