Population and Sustainable Development Goals: Establishing Linkages in the Pakistani Context
# Table of Contents

MESSAGE .................................................................................................................. vii

FOREWORD ........................................................................................................... ix

ACKNOWLEDGMENTS ................................................................................................. x

CHAPTER ONE ............................................................................................................. 1
  Population and Poverty in Pakistan ................................................................. 1

CHAPTER TWO .......................................................................................................... 27
  Population, Sustainable Economic Growth, and Productive Employment ........... 27

CHAPTER THREE ...................................................................................................... 43
  Education and Population: Making the Case for Accelerating SDGs in Pakistan .... 43

CHAPTER FOUR ....................................................................................................... 63
  Reducing Population Growth and Increasing Gender Equality: Fostering a Virtuous Cycle ........ 63

CHAPTER FIVE .......................................................................................................... 73
  Investing in Family Planning: Key to Saving Lives ............................................ 73

CHAPTER SIX .......................................................................................................... 85
  Linkages between Population Growth and Climate Change .............................. 85

EPILOGUE ................................................................................................................. 99

REFERENCES ..........................................................................................................101
CHAPTER TWO

Population, Sustainable Economic Growth, and Productive Employment

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This chapter provides an understanding of how population and demographic factors affect progress towards SDG 8 – "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" through demonstration of the implications and interlinkages of population growth, employment prospects and economic expansion. It gives an overview of the state of Pakistan’s economy that suggests that despite little fiscal space for investing in human capital development there must be an increased focus on creating a more inclusive participation in the workforce. The following analysis of the impacts of family size on household savings and poverty emphasizes that a large population size and weak job creation outlook exacerbate Pakistan’s current economic predicaments as well as stifle poverty reduction efforts. Improved and timely family planning efforts can enhance gainful employment for women across the medium term and increase standards of living for smaller families.

Additionally, considering studies that have simultaneously modeled climate change, food security, and population growth it is suggested that the country’s diminishing capacity to provide for food security needs can be mitigated through the reduction of fertility rates. This chapter concludes with policy recommendations under a two-pronged intervention approach focused on addressing the excess population growth underpinning the prevalent imbalance between people and resources and improving the functioning of the economy.

Background

Investing in family planning is now appreciated as an instrument to help countries towards a lower rate of population growth, ultimately culminating in a higher per capita investment in human capital. Taking East Asia as an example, this process was coupled with greater opportunities for decent and productive employment, and therefore also helps countries in achieving their poverty reduction goals.

The annual average growth rate of Pakistan’s population according to the census of 2017 is 2.4 percent. In absolute terms, the population was 207.8 million in 2017 compared to 132 million in 1998. This total size of population does not include several areas in Gilgit-Baltistan and Azad Jammu and Kashmir. In any case, the 2017 census estimates now make Pakistan the fifth largest country in the world in terms of population size.

The census also reveals that Pakistan may perhaps be the fastest urbanizing country across South Asia. There are 75.6 million people (or 36.4 percent of total) now living in urban localities. Only in Sindh province 52 percent have already moved to urban settlements. The Punjab province remains the most populous province and home to 53 percent of the total population. This is followed by Sindh (23 percent), Khyber Pakhtunkhwa (14.7 percent), Balochistan (5.8 percent), Federally Administered Tribal Areas (2.4 percent), and Islamabad (1 percent). The top four cities by population haven’t changed since the previous census. These remain Karachi, Lahore, Faisalabad, and Rawalpindi. However, Multan which was at number five in
1998 has been taken over by Gujranwala. This is followed by Peshawar, Multan, Hyderabad, Islamabad, and Quetta at number ten.

The life sex ratio (that is, males per 100 female) also changed since the previous census. This ratio now stands at 105 compared to 108.5 in 1998. While 63 percent of Pakistan’s population was under 25 years of age (indicating a potential demographic dividend), and overall population growth is lower than the growth of the labor force, it is still worrying that in the next three decades, Pakistan’s population could easily double according to business-as-usual estimates. If Pakistan’s economic expansion is weak and resources are not created to absorb new entrants into the labor force, this significant increase in population could have implications for SDG-8: “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” (Ishfaq et al. 2017; Ahmed 2015).

A key objective of this chapter is to study these implications and interlinkages of population growth, low economic expansion, and weak employment prospects. We also make a case for how family planning could play a pivotal role in keeping population growth within limits which can be sustained under prevalent economic circumstances. The next section provides an overview of state of the economy. This is followed by an analysis of how family size impacts household savings and poverty. Section 4 explains how population pressures could have implications for education, health, and food security. Section 5 will provide policy recommendations which are then followed by concluding remarks.

State of the Economy

Several decisions that impact macroeconomy are usually made at a household-level. Usually, families decide their preference for education, labor, and savings. The recent literature argues that family economics should be a key aspect in macroeconomics. The changes in family structure have implications for aggregate labor supply and savings. Also, accounting for families (or decision making by families) is important to arrive at differences between the rich and the poor. It is in this context that a critical study of the state of the economy and fiscal space available for human development and family planning interventions becomes crucial.

Despite some instances of short-term growth in Gross Domestic Product (GDP), Pakistan remains unable to transition towards sustained expansion in agriculture, industrial manufacturing, and services sector over the longer run. Box 1 shows that annual growth in GDP has remained on a downward trajectory over the longer term which in turn made it difficult to provide decent jobs and reduce poverty.

Two sets of reasons are often provided while diagnosing the weak economic growth in Pakistan. First are the structural factors in governance, including security, law and order issues, elite capture of productive resources, and a general lack of policy continuity in the longer term. Second are institutional factors including weak capacity of to undertake reforms much needed to boost private sector competitiveness and the ability to provide more jobs. These could include reform of taxation, utilities, and state-owned enterprises, which continue to compete with the private sector for resources and markets.

The economy's weakness in attracting or retaining savings coupled with low capacity to absorb aid, reflected in low foreign savings to GDP ratio has resulted in weak investment rate. While government's own investment through development budgets continue to support some economic growth, there are still several areas across Pakistan where implementing infrastructure and social sector programs is not possible. The reasons for this include weaknesses in law and order, contract enforcement, deficit of relevant skills, and infrastructure and energy shortages, including low internet penetration rate. This milieu has in the past curtailed flow of public and private investments to areas particularly Balochistan, southern
Punjab, Interior Sindh, Karachi, and the western parts of Khyber Pakhtunkhwa. Even the local private sector is unable to envisage long-term business plans (Ahmed and Qadir 2018).

The low levels of incentives to boost productivity via, for example, technological adoption results in large amounts of potential domestic investment remaining unrealized (Nasir and Khalid 2004). Recent evaluation of financial sector inclusion programs has also indicated less than anticipated progress towards channelizing savings towards productive uses—a criticism which is also levelled against the rising levels of remittances Pakistan receives from diaspora abroad. Only once the pre-requisites for conducive private activity are in place and incentives for education, skills, and technology attainment are available, countries start to witness growth in capital formation.

The economic growth process is also determined by how efficiently a country utilizes its endowments of capital and labor. Usually, this efficiency is measured by total factor productivity. We note in Box 1 that Pakistan has had low levels of productivity vis-à-vis other Asian economies. The existing literature attributes this to weak progress on education, health, institutions (and their governance), and trade openness (Isaksson 2007).

**Box 1: Pakistan Macroeconomic Performance**

![Graphs showing GDP growth, fixed investment, productivity growth, and savings rates over time.](image)

*Source: Economic Survey of Pakistan (various issues); World Development Indicators 2018; EconMap database 2014.*
The fiscal resources of the state are also under stress. Large budget deficits have continued to result in rising levels of debt and debt servicing (Ahmed and Wahab 2012). The gap between tax revenues and government expenditures (as a percentage of GDP) could not be significantly narrowed. The low levels of tax effort are attributed to various exemptions, concessions, and preferential treatments, provided in the tax laws among other reasons (Pasha 2019). The SROs governing such concessions are rarely discussed in the parliament and are usually the discretion of the government in power—something which the International Monetary Fund now wishes to see changed. The task of increasing tax collection is all the more difficult in the presence of weak tax administration reforms. Despite several automation attempts, tax departments at federal and provincial levels suffer from human resource gaps and a large scope of discretion which ultimately gives rise to rent seeking (SDPI 2013b).

**Box 2 Government Budget & Prices**

![Graphs showing government budget and prices over time and across sectors.]

Source: Economic Survey of Pakistan (various issues) and World Development Indicators 2018.

Past attempts to practice austerity have not been successful. In fact, Covid-19 has also forced the government to put austerity goals behind and expand various social safety nets. The major items in the government’s expenditure portfolio include debt servicing, salaries and pensions of a growing public sector, and defence expenditures—all items which may not see a large cut in the short term. This has left little fiscal space for development spending on uplift of infrastructure and augmenting human capital—fundamental ingredients for economic growth. We observe in Box 2 that public spending on education as a
proportion of Pakistan's national income has not seen much increase. The same trend prevails in the case of the health sector.

The 18\textsuperscript{th} Constitutional Amendment and the NFC award allowed provincial governments greater control over development projects in all social sectors. The provinces have yet to demonstrate discipline in the utilization of these increased levels of transfers from the federal government. In fact, even some part of the Covid-19 emergency funds could not be utilized by the provinces even after six months of the initial outbreak in Pakistan.

None of the provincial governments have fully implemented results-based management and put in place key performance indicators which can ultimately enhance the efficiency of scarce financial resources. The efforts to improve provincial tax revenue collection have seen some success; however, several economic activities under the jurisdiction of provinces including agriculture, property, and transportation can still deliver much greater revenues than the current levels (Ahmed and Nasvi 2016).

An increase in the size of the government and persistently high budget deficits also pose inflationary pressures. Apart from eroding the purchasing power of the poorest of the poor and increased poverty, this also leads to increase in input prices for businesses in turn affecting the country's export competitiveness.

In the trade sector, we note that the export receipts have not grown at a pace envisaged across various trade policies. A key reason has been the inability to diversify exports in terms of products and regions. The low sophistication level in production of manufactured goods, quality control issues, high cost of inputs, and the shortfall in energy supply are some other macro-level reasons. More than 50 percent of exports are concentrated in textile and garments which are known to have a static demand abroad and face stiff competition from relative newcomers such as Bangladesh and Vietnam (Box 3). The research and development-based and technology-embodied exports have remained under two percent of the overall exports. Pakistan’s exports to Asia—a continent termed as a driver of global demand—haven't increased by much. In the region, while exports to Afghanistan and China have shown some progress, trade with India and Iran and most economies of Central and South Asia remains limited (Hamid & Hayat 2012).
The remittances from abroad have had a stabilizing effect on Pakistan's balance of payments. This has helped the foreign exchange reserves and supported value of the Pakistani rupee in the medium term. These remittances have also been found to reduce poverty via an increase in non-farm incomes in relatively poorer districts of the country, particularly Western Khyber Pakhtunkhwa (Ahmed et al. 2010).

The above-mentioned state of the economy has implications for Pakistan's pursuit of SDGs. The process of sustainable development will involve a conscious drive to making economic growth processes inclusive, ensuring social justice and protection of environment and natural resources. Accomplishing such a sustainability framework requires responsible accounting of the resources at the national and sub-national levels which are being devoted to production and distribution of benefits. This framework also binds us to treat our environment and natural endowments as a shared resource between current and future generations. In doing so the current generation assumes the responsibility of safeguarding the natural resources and promoting a growth of natural capital (Reid 1995).

The day-to-day economic management will need to be supplemented by having a longer-term shared vision for the economy. This is possible through a focus on three main areas. First are the efficient governance mechanisms for public service delivery. A failure to do this in letter and spirit resulted in Millennium
Development Goals (MDGs) offering less than desired results. Mostly, wherever countries have defaulted on their targets under each of these goals, one finds a governance gap or more specifically: a) state’s weak capacity to focus on targets that can lend maximum gains in terms of human development and in turn inclusive growth; b) missing reform of civil service responsible for the delivery of development goals; and c) weak capacity of communities to demand reform of social services (Ahmed 2014).

Second, economies such as Pakistan’s have regularly faced violence of various types. Insulating development goals, policies, programs, and projects from violence has been difficult under weak institutions. The third aspect is that of women’s safe participation in public spaces, taking action against violence against women, and enabling women to become active members of the labor force. The gender mainstreaming in national level policies is need of the hour.

This essay argues that the current state of the economy leaves little fiscal space for investing in human capital development. We however make a case in the next section that even in case of present scarce public resources, an increased focus on female population is the need of the hour in order to have a more inclusive participation in workforce. This is only possible if women aren’t burdened with constant childbearing responsibilities and have access to gainful employment opportunities.

**Family size, household savings, and poverty reduction**

We discuss in this section how family planning can help enhance women’s empowerment, which can in turn lead to better standards of living for smaller families through channels which include higher household savings. Pakistan’s economic predicaments and challenge for poverty reduction often gets exacerbated due to a large population and stock of unemployed in the country. Figure 2.1 indicates how people in working age population continues to grow and the gap between this and employed labor force is now starting to widen. This implies that the economy’s capacity to absorb new entrants in the market is low—also shown by the gradual medium-term increase in the number of unemployed (Government of Pakistan 2011).

**Figure 2.1: Pakistan’s employment pattern**

![Diagram showing employment pattern]

Source: Economic Survey of Pakistan

Existing literature highlights the importance and interlinkages between smaller family sizes and higher savings rate—much needed to put developing economies on a high growth path (Sajid and Sarfaraz 2008). Jin (2013) had reported—based on data from 1983 to 2011—that household savings rate increased from
10.4 to 30.5 percent due to family size getting smaller and decline in fertility rates. The same has also been explained in the case of Pakistan. For example, Arif (2013) states: "a low dependency ratio, associated with a smaller number of children per family as a result of fertility decline, can contribute to economic growth through increased household savings." The author argued that population and demographic factors among other variables explain poverty in Pakistan. In particular, the family size, change in the age composition of household members, and gender of the head of household have an impact of household poverty.

Any discussion on the long-term pattern of family size remains incomplete without discussing the socio-demographic determinants of unmet need for family planning in Pakistan. For married women, Arif and Pervaiz [2019] have explained how the likelihood of unmet need for family planning could come down as the wealth status of women's household, number of living children, and husband's education increase. Women residing in rural areas were found more likely to have unmet need for family planning as compared to those in urban areas. Apart from the economic factors this is also attributed to a lack of exposure to information and mass media. This contributes to fear of side effects for using contraceptives. Lack of formal employment or weak labor market contracts have also been found to exacerbate these fears. With regard to social and religious conservatism, literature seems divided as to how this may or may not lead to a preference for larger families in Pakistan.

A household's ability to access decent health services play a large role in intra-household decision making in favor of family planning. Sathar (2013) has explained:

nearly 1 million women in Pakistan seek unsafe abortions every year, a decision determined by the high level of unwanted pregnancies. Improved access to quality services will reduce the number of abortions and maternal and child deaths. Second, it is clear from inequities in unmet need for family planning and contraceptive use by income levels, and across urban and rural populations, why women who are poor have as many as two unwanted pregnancies compared with a quarter of this number for women who are not poor.

The author has made a case for the health sector to prioritize family planning. A careful evaluation is required if the Lady Health Worker Program is achieving this goal or needs to be supplemented by other related interventions. The private sector healthcare services while available in urban areas are mostly unaffordable by women from poorer households. An urgent study is also required to assess how COVID-19 may have disrupted the delivery of family planning services. This could provide important lessons regarding remedial measures once such services are disturbed due natural or man-made disasters.

It is important to understand that population's age composition matters for economic growth and decent jobs (Fox and Dyson 2015). Demographic dividend can only be realized once fertility rates decline, and the proportion of the working-age population grows. This change in age composition if coupled with an increase in savings and investment could bring dividends in terms of expansion of output and employment.

**Implications for Education, Health, and Food Security**

The population pressures and low levels of economic endowments have implications for future attainment of education, skills, and decent health standards. The population-poverty-inequality nexus has made provision of social protection difficult (Osebakhi et al. 2020). The United Nations Development Program's (UNDP) Human Development Index (HDI) for 2020 puts Pakistan at 154 out of 189 countries. According to the Ministry of Federal Education and Professional Training, 44 percent (or 22.8 million) school-age children falling between the ages five and 16 years are out of school. The pupil-teacher ratio in primary

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17 This section also aims to update the authors perspective in Ahmed (2015).
schools of Pakistan was 44.28 in 2018, which is a decline from the 2016 number of 47.63. Almost 21 percent primary schools in the country do not have an appropriate size of faculty and are usually run by a single teacher.

Children not being in schools and belonging from regions hit by local violence are more vulnerable. For example, 58 percent of children in erstwhile FATA are not in school. Similarly, in the case of Balochistan, 70 percent children are not present in school. These children have often been found to fall in the hands of anti-state interests.

Shrinking public resources coupled with large family sizes (particularly in rural communities) gives rise to disparities in education. For example, the female literacy rate as calculated for individuals aged 10 and above, according to the Pakistan Economic Survey 2019–20, is 49 percent. This is low if compared with male literacy rate at over 70 percent. It is therefore not surprising that the global gender gap index—a measure to capture gap between men and women across socio-economic indicators—ranks Pakistan 151 (third-to-last) out of 149 countries in 2020.

A large population will of course also have implications for health outcomes. While increasing the budgetary resources for this sector remains a challenge, equally difficult is to bring improvements in areas which could supplement health sector outcomes, for example provision of safe drinking water and efficient disposal of waste for a growing population. Most independent assessments have shown concern over the current state of infant mortality. According to 2016 statistics, out of 6.3 million children born in Pakistan, 441,000 died within the first 12 months. In fact, almost 2,900,000 children die before the end of their first month.18

UNICEF now considers Pakistan the riskiest country for newborn children. This is attributed to women in Pakistan having a lesser probability of receiving appropriate assistance during pregnancy. There are only 1.4 skilled health professionals for every 10,000 people. Going forward, it remains a challenge to have more mothers give birth in decent health facilities and under the care of skilled attendants (also see Manzoor et al. 2016).

The productivity of future labor force is also projected at low levels as out of the overall population of children, one-third are underweight. Similarly, 40 percent of under five children are stunted. Almost one-third of the children are anemic due to iron deficiency. The Ministry of Planning, Development and Special Initiatives, in its 2017 report “The Economic Consequences of Undernutrition in Pakistan: An Assessment of Losses,” informed that malnutrition’s economic loss stands at 3% of national income or USD 7.8 billion. To reverse this situation, donor-supported food fortification programs are underway, the sustainability of which can only be ensured through proper ownership of federal and provincial governments.

As population rate exceeds state’s ability to augment health systems, the case of missing facilities at public hospitals requires urgent attention. Sindh, the second largest province in terms of population, faces this challenge where public hospitals only have one-third of the required facilities available. Patients from the rural districts throng to hospitals based in the cities, particularly Karachi, Hyderabad, and Sukkur, often simply due to the lack of beds in rural areas. The capacity to respond to sudden disease outbreaks has also declined. For example, between 2016 and 2017, the number of affected persons by dengue in fact increased by 25 percent. In 2019, Grade II emergency by WHO was announced upon HIV outbreak in Sindh. This gave rise to several outbreaks afterwards in which majority of effectedes were children.

The state’s capacity to provide for food security needs of a growing population has also been on a downward trajectory. While food availability is not an immediate concern, food access—that is, distribution

18 Also see Ahmed & Ahmed (2014) for poverty and social impact analysis of immunization programming in Pakistan.
of food, food utilization, and dietary patterns—remains a concern. The daily diets have been termed by experts as lacking in the required levels of diversity; much is needed to overcome the deficiencies of micronutrients.

Studies which have simultaneously modeled climate change, food security, and population growth show how the lower fertility rates resulting from greater use of family planning can support food security. This happens through two important channels. First, by slowing population growth, thereby easing demand on already-stressed agricultural systems; and second, by changing population composition that can enable improved nutritional outcomes among children under five. These children have been termed to be highly vulnerable to food insecurity.\(^\text{19}\)

**Attaining SDG–8 Amid Rising Population: Some Recommendations**

In the light of available evidence, we have tried to highlight that with rising population and low economic growth rates, potential to create decent jobs diminishes. In this regard, we offer some policy recommendations below focusing on two-pronged intervention. The first is to keep population growth under check. The second is to improve functioning of economy so that both public and private sectors can complement each other and transition to higher levels of savings and investment levels, in turn also expanding opportunities for employment.

a. Using evidence for policy and practice interventions: With provincial governments mandated to have a larger role in managing population and demographic priorities, it is important to have region-specific evidence and its role in advocacy and capacity building measures. While advocacy and outreach practices also require regular innovation, improved capacity is required for non-government organizations working in this space to provide orientation services to communities. It is important to view NGOs as an important element in social accountability which in turn could help the monitoring and learning process.

In this regard, Jabbar et al. (2015) concluded that policy makers, public sector service providers, and private sector family planning programs need to focus on untapped pool of never users of contraceptives. This pool could include, for example, younger women from “underserved provinces, in higher wealth quintiles, who desire more children.” Authors also suggest covering catchment areas, particularly in Balochistan and Sindh where there could be fewer lady health workers and ignorance to available methods.

b. Interventions to reduce economic gap in use of family planning methods: Family planning programs in Pakistan have the potential to target women, children, and wellbeing of disadvantaged groups. Having a multisectoral approach to address various sources of poverty and inequality through family planning interventions could lend greater efficiency and value for money. Aslam et al. (2018) have shown that while such programs usually address health-related needs of households, it is likely that with similar resources but better planning, education-related absolute inequalities among urban and rural dwellers could also be addressed. Overall, the medium to longer term provision of improved education will have positive spillover effects for health and population-related outcomes.

c. Remove barriers to productive employment: This perhaps will only be possible by focusing on both wage- and self-employment opportunities across the country. Absorbing increases in the labor force through public sector initiatives is not sustainable and therefore barriers to private enterprise growth need to be addressed. It is only through a reduction in regulatory burden and other business costs faced by the firms that the state could create more jobs in the productive sectors (Ahmed 2017). The

\(^{19}\) For details: “Improving Access to Family Planning Can Promote Food Security in a Changing Climate,” Accessed via web: https://www.measuredimpact.org/resources/publications/1a-12-74, accessed on November 9, 2020
The figure below indicates some of the most pressing problems faced by private enterprises including rent seeking and a complex tax regime—areas where federal and provincial governments could help.

**Figure 2.2: Most Problematic Factors for Doing Business**

![Pie chart showing the most problematic factors for doing business](image)

*Source: World Competitiveness Report 2017-18*

This effort has to be complimented by expanding skills base and issues of liquidity and start up financing faced by newcomers. This will require, among other things, expediting active and passive labor market programs. Covid-19 has created an emergency to speed up the digital transformation in most sectors and professions. Therefore, the existing curriculum of technical and vocational education training institutions needs to be revisited. A more proactive lending ecosystem is required so that financing needs of youth and startups are addressed—an area where central bank and other financial institutions could help.

d. **Protect fiscal space for human development and infrastructure**: Pakistan cannot afford weaknesses in public finance management which in turn could make it difficult to finance much needed enabling infrastructure that complements human development. It is imperative that, in line with the commitment to IMF Extended Fund Facility, federal and provincial governments continue to increase resource mobilization efforts, through tax and non-tax measures and protect budgetary allocation for both social sectors and infrastructure uplift. This is in line with the spirit of Fiscal Responsibility and Debt Limitation Act (see Ahmed 2015; Jamali and Ahmed 2015).

The wastages in government expenditure can be minimized through appropriate policy measures, accounting practices, and real-time monitoring and evaluation of public schemes. Currently the federal public sector development program and spending under provincial annual development plans have multiplicity of similar schemes leading to wastage of scarce budgetary resources. Also, it is clear from recent evaluations by Planning Commission that almost one-third of the disbursed development spending is not reaching the beneficiary (Khan et al. 2016).

e. **Strengthening public-private dialogue process**: The public sector alone may not be able to put SDGs back on track given the Covid-19 emergency. It is important that local private sector should see
investment in human resource development as a priority and look into the potential of public private partnerships on a wider scale.20

The role of NGOs at the community level in creating ownership for SDG 8 is important. Behavioral and attitudinal changes necessary for adopting new technologies in production processes (for example, a focus on greening the supply chains in manufacturing sectors) can come about through industry mobilization by local NGOs.21 Social entrepreneurship is another model at the local level that can help informal innovation, particularly across rural communities. This should be encouraged through legislative, policy, and regulatory measures (see also Yaseen and Ahmed 2016).

f. Role of the parliament to keep SDG 8 on track with a focus on population and demographic priorities: The parliamentary oversight should keep the achievement of SDGs on track. There are several instruments which parliamentarians could employ to exercise oversight. For example, as per the mandate given to the elected representatives, the parliament could ask the government for: regular information; public clarification of policy; and obtaining information from sources outside the government. Parliamentarians could express views to the civil service and the public; form a special committee to meet regularly to discuss this subject; and resort to a sub-committee which can co-opt technical experts.

The Parliament’s SDGs Task Forces in the federal and provincial level assemblies should ensure that the commitment to SDG-8 remains a priority in the wake of rising working age population. These Task Forces should also ensure regular and broad-based debate around keeping a focus on above mentioned issues. The Parliament’s leadership, for example Chairman Senate and Speaker National Assembly, should seek updates on the implementation status from the Task Force decisions, particularly those related to population issues. In the current setup under PTI, the Task Force on Population is being headed by the President which should provide the initiative with an additional impetus.

These Task Forces also need to realize that civil service remains the single most important instrument for development administration. Therefore, reform of the public administration should be high on the agenda. Innovative models of reforms in line with success examples from other countries can motivate the civil servants towards a focus on outcomes and better efficiency and effectiveness of public expenditure. Similarly, the Task Forces at the provincial level also need to ensure the stakes of women and marginalized groups.

g. Looking at population priorities through social justice lens: It is important to ensure a focus on family planning and health issues in existing social protection programs. Currently the major social protection programs by the federal and provincial governments include: (a) social security (Government Employees Pension Fund, Employees Old age Benefits Institutions, and Workers Welfare Fund); (b) cash assistance (Benazir Income Support Programme, Zakat, and Bait ul Mal); (c) subsidy for Utility Stores Corporation, and on consumption of electricity, gas, wheat, and sugar; and (d) employment promotion program (Works Programme, Grant to Pakistan Poverty Alleviation Fund, Youth loan schemes). It was pointed out in SDPI (2013a) that there remains a room to make these programs multi-sectoral and improve targeting efficiency, extent of program coverage, degree of ease of access, adequacy of support, grievance redressal, sustainability, and exit mechanism from the above-mentioned program.

20 Private sector has also been a key actor in peace building; see Khan and Ahmed (2014).
21 See also Abbas and Ahmed (2016).
There are also various conditional cash transfer programs where family planning and health priorities could be integrated. The stipend program for female students in Khyber Pakhtunkhwa province which has now been upscaled and made universal across the province is one such example (Ahmed and Zeshan 2014). Envisioning several complementary outcomes together will require strengthening the PPI project proposal preparation) process at planning departments. While the project proposals are being formulated, there is minimum input from health and education sector practitioners responsible for spending the available funds. More inputs are required from institutions and specialists that help uncover the reasons for delays in disbursements of budgets.\textsuperscript{22}

Even where a monitoring mechanism for public sector projects is present, the feedback to the higher tiers in management is missing. The evaluation and learning based on the monitoring data is often found missing. The grievance redressal mechanisms are not properly documented and accessing them involves high costs. IT-enabled complaint management is an innovation in some projects and should be replicated in case of other projects. The synergies with other transfer programs in the same provinces need to be created (Ahmed et al. 2013). There is also a need to deliver these programs in hard areas or regions hit by violence.

The social protection outcomes can also be improved through promoting volunteerism among youth and communities in a manner that the activities conducted have a linkage with job creation. Some models linking volunteerism and self-employment are explained in UN DESA (2007). Second, the role of corporate social responsibility (CSR) in sustaining social sector programs such as education and health has not been fully explored. Many of the public sector social assistance and labor market (job creating) programs that are hard to sustain over the longer run can find another life via cash or in-kind channeling of CSR (Khan and Ahmed 2014).

h. Paying attention to the sustainability of growth process: There has to be a conscious effort by both public and private sectors to move away from the past’s lackluster approach to deal with climate change and environmental deterioration. Pakistan’s environment quality indicators require attention if economic expansion has to be sustained in a responsible manner over longer time periods.

This challenge is closely related to the energy, food, and water security in the country. A lack of coordination across provinces on these subjects could be avoided through a well-functioning national-level Climate Change Authority. Enhanced Coordination among the conservation and environmental protection departments of provinces and Islamabad in the post 18th amendment scenario is much desired. Environmental issues and climate change do not take into account varied political perspectives and as such a national response needs to be coordinated and comprehensive. The already approved National Water Policy also waits its implementation in letter and spirit.

Government commitment also needs to show in terms of greater budget disbursement to relevant ministries and departments responsible for correcting production processes. Currently institutions responsible for environment and climate change policy and governance get only a fraction of the development funds. This has major repercussions in terms of technical capacity to monitor the impact of climate change as well as industrial and residential pollution. A regional approach to climate change is also required so that all in the neighborhood share a common vision for responsible production and consumption.

It is also the case that the demand for environmental reforms from the communities is weak. Only a few civil society organizations are involved in the capacity building of communities vulnerable to climate change. These efforts need to be scaled up given the rising fossil fuel consumption, depletion of forests,\textsuperscript{22} The case is not very different in the case of health sector projects. For example, see Ahmed and Ahmed (2014).
and changes in land use. The development plans and provincial industrial policies (if any) are also not in compliance with the national climate change policy. One example is the government's goal to engage Chinese counterparts to expand coal-based power generation capacity in Pakistan. This can threaten Pakistan's already vulnerable environment profile.

The capacities to manage natural resource endowment have weakened. Pasha (2011) explains that since 2000, there has been little change in the water availability at farm gate. Due to poor maintenance of canals the surface water provided by irrigation system suffers significant leakages. Private tube wells which are the main sources of ground water have increased by 58% since 2000. Deforestation has also been rampant and almost 32% forest area had depleted between the years 2000 and 2018.

The entry point for reform is essentially people's own evolving understanding about how changes in climate are responsible for decline in crop productivity, food availability, and income. Zaheer and Colom (2013) show that 72% population in Pakistan feels that the government will not be able to respond to the climate challenge. A possible agenda for the development partners in Pakistan can be to strengthen the civil society's efforts towards sustainability which can act as a pressure on the state institutions. The development partners providing technical assistance to the government should seek compliance of public investment with green economy principles—that is, where income and employment are driven by investments that reduce emissions and enhance energy efficiency.

The responsibility for protecting environment also has to be taught in academic institutions. The university and college level curricula need to provide greater space to education regarding environment and climate change. The universities can also help in bridging the data and information gaps which remains a major hindrance in preparing region specific environmental protection plans. For example, in several regions, the data regarding composition of air pollution (in a particular city) or industrial waste were missing. Since the government departments currently lack capacity in this regard, the academia may be supported to fill that gap.

Water resource development also remains a neglected area. While the water policy came out in 2018, because of the political transition and election phase progress towards implementation framework has been very slow. Provinces have also come up with their own laws on water management. The government will also need to show resolve and take some unpopular decision to conserve water resources and promote their responsible use. The issue of water charges in the agriculture sector, for example, will be a key test of the government. Likewise, political consensus is also required to build smaller scale dams and reservoirs for rainwater harvesting.

Establishing a groundwater authority was also one of the recommendations of the water policy. That authority has not come about. An active debate is required in the parliament on devising comprehensive terms of reference for this authority so that depletion of groundwater aquifers can be quickly addressed.

Provision of clean drinking water was a key election promise of the incumbent government. This is closely related to the high health spending which citizens have to incur due to lack of safe water in several parts of the country. While several initiatives were undertaken during the past few years to improve service delivery in the water sector (for example, Punjab Saaf Pani Company, Changa Pani, and some initiatives by Water and Sanitation Agency, Hyderabad), an evidence-based evaluation is still required to learn if these programs have delivered their goals and perhaps can be replicated in other parts of the country.

Conclusion
This essay provides an understanding of how population and demographic factors could impact progress towards SDG-8. We have suggested an approach which prioritizes attention to family planning issues as
household size impacts savings and poverty. We have also tried to advocate that a combined focus on SDG-8 and population priorities could improve social justice and environmental outcomes in Pakistan.

The policy response to promote social justice should not be limited to addressing unequal patterns in income levels. Horizontal inequalities such as those between various culturally formed groups within a society are equally important (Stewart 2002). Such inequalities are linked with identity based distinctions in a society and promote grievances among the relatively neglected and may possibly facilitate conflict (Besby 2008). These types of differences could exacerbate gender, racial, ethnic, class, or nativity inequalities. Horizontal inequalities pose a challenge to Pakistan’s law makers and practitioners’ community. All political parties in the country are guilty of not giving enough ‘voice’ and ‘effective representation’ to the women, youth, and minorities in the country. Recent literature has also suggested the need to ease in-country migration which in turn can help social mobility across Pakistan (Jantaq 2017).

Our approach has validation from the East Asian experience. The economies known as ‘Asian Tigers’ capitalized on their demographic dividend through a policy focus and sustained investment in education, healthcare, family planning, and supporting inclusion of women in the workforce (Mir 2018).

This inclusive participation in the workforce is only possible if women aren’t burdened with constant childbearing responsibilities—an aspect which requires Pakistan to continue its efforts towards family planning. Improved and timely family planning efforts can help enhance gainful employment for women over the medium term, which can in turn lead to better standards of living for smaller families since smaller size of the household contributes to higher savings by the family.

An opportunity to achieve all this in Pakistan will only be around until the time the country has low numbers of economically dependent people. And, this opportunity can be seized by investing in human capital development, along with an increased focus on female population.