

Population Growth and Weak Human Capital¹

Ishrat Husain

Population growth has both mathematical as well as economic repercussions. Let us start with mathematics. Assume country A's GDP grows at annual rate of 5 percent. If the population growth rate is 2.5 percent per capita income will grow at the rate of 2.5 percent and double in 28 years. Another country B has the same GDP growth rate but its population growth is constrained to 1.5 percent, its per capita income would double in 20 years. Country A therefore suffers a penalty of 8 years simply because it wasn't able to contain its population growth rate. This is the contrast between Pakistan and Bangladesh ---the latter had had higher population than Pakistan in 1971 while by reducing its total fertility rate (TFR) has 170 million people today compared to 240 million in Pakistan and was able to achieve 40 percent higher per capita income.

On economic consequences, Empirical studies show that there is a causal relationship between improved living standards and lower fertility. Higher fertility prevents families from making the longer term investment needed to raise living standards. Rapid population growth tends to increase scarcity of productive capital per worker thereby declining worker productivity. That reduces savings propensity leading to lower investment and thus decrease in per capita physical capital per worker. Pakistan's investment ratio has remained around 15 percent while that of Bangladesh is 30 percent. In addition, there are collateral benefits and spillovers from lower population growth rate to other sectors of the economy.

What puzzles me is a sudden and abrupt jump between 2017 and 2023 censuses after a secular declining curve between 1972 and 2017. Why such a reversal in the trend? It is not

¹ Remarks delivered at the Dialogue organized by the Pakistan Business Council at Islamabad on January 28, 2025

obvious intuitively neither is it explained in any analytical work. Having been a participant in the discussions at the cabinet and other meetings I can submit that there is pressure from different political parties that their respective areas or sub-provincial entities should show this specific number as the census outcome otherwise they would reject the results outright. This has placed a lot of skepticism in my mind about the validity of the reported numbers. Correlated variables such as child mortality, female enrolment CPR etc do not substantiate this increase in population growth rate. In my view the exceptionally high weight assigned to population i.e. 82% percent in the NFC award and the delimitation of constituencies with varying electorate count do lead to political pressures for exaggeration and overestimation.

THE INDIAN EXPERINCE

Here it would be pertinent to refer to the practice adopted by India which was faced with similar problems. They froze the population estimates and delimitation of constituencies based on 1971 census for almost five decades. The weight of the population in allocation of divisible tax pool was reduced and more weight was assigned to backwardness, poverty, and tax effort. As a result, the southern states were able to show impressive demographic performance and decline in TFR as they were not penalized for lower population count. At the same time they earned a premium as their lower population count did not deprive them of the number of seats in LOK Sabha . If the actual population numbers were taken to delimit the constituencies rather than the frozen ones they would have been given fewer number of seats in the Parliament and lower allocation from Divisible Tax Pool. Under those circumstances the Southern states would have little incentive to work on population control. National and macro-economics policies remained the same for all states- the Indus- Gangetic plain states of the north , the peninsular states of the south and the west but population growth rates at the state level showed highly variable results with Rajasthan showing an expansion of 166% in 1971-2011 while Kerala 56%. The difference becomes quite obvious if you compare a set of social and economic indicators which

are correlated with low fertility rates. All the five Southern states had higher proportion of urban population, high female labor force participation rates, low illiterates among the reproductive age females, better health status including child mortality rate , higher CPR, lower share of agriculture. Andhra Pradesh AP , Karnataka, Kerala, Tamil Nadu , Telangana had average TFR 1.6-1.7 while UP, Bihar, recorded 3 and 3.2 .

THE FAILURE TO CONTROL POPULATION IN PAKISTAN

Why Pakistan has lagged behind India and Bangladesh in controlling population growth?

Besides the perverse incentives which I have described my research shows that it is the mix of weak governance, poor management and dysfunctional institutions in the delivery of basic public services- education, health, potable drinking water supply ,sanitation, and garbage disposal etc. that has retarded the process of human capital formation , social development and perpetuated income, regional and gender inequalities . There are strong interlinkages between all these three and we have observed that for a brief period of time in Pakistan during the period 2002-2007 when these functions were devolved to the local government and they were fully resourced , Surveys of public opinion and social audit reports show a great deal of citizen satisfaction level with the delivery of these services compared to the pre-or post-devolution period. Fragmentation and overlapping responsibilities, turf preservation and turf fights among the departments, lack of accountability for results, absence of coordination mechanism between the federal and provincial governments and among the provincial departments and implementing agencies have led to the current poor indicators. How can a Secretary sitting in Lahore supervise and monitor more than 37000 primary schools spread all over 38 districts in the province. ? Under the devolved system each District Education Officer was responsible for the supervision , monitoring and remedial actions. One had hoped that after the 18th amendment and the 7th NFC award the local governments would be restored fully empowered and also get their due share but this has not been the case. On the contrary there has been a

perceptible move towards over centralization and concentration of powers and resources in the hands of the provincial departments. Examples of water and sewerage, solid waste disposal boards, Building Control Authority being transformed to provincial entities in Sindh come readily to mind. You are all aware that one of the successful initiatives of lady health workers has gone astray. The separation of Lady Health workers and Population Health Workers and Health and Population welfare departments working not in tandem but in opposite directions has been a tragic factor in the country's population dynamics. National action plan on population had targeted TFR to decline from 3.6 to 2 by 2025 and 2.1% by 2030 but this gap between policy and performance is a result of the weak governance and institutional decay .

Sustained economic growth takes place due to a combination of labor supply and productivity .While labor supply has been plentiful productivity- not that of labor but Total Factor Productivity TFP has lagged behind. Low investment rate , poor quality of investment, failure to embed technological changes in production process, and organizational inefficiency due to a culture of rent seeking has kept TFP growth constrained. Nobel Prize winner Economist Arthur Lewis had postulated that reallocation of Labor from low productivity agriculture to higher productivity industrial and services sectors would raise overall growth rate with the same number of workers through rural urban migration would raise overall growth rate with the same number of workers in the economy. This has not happened in case of Pakistan because urbanization has been haphazard, unplanned with migrants working as vendors, thela walas, footpath sellers, daily wage earners are employed in informal sectors. 57% of urban population in Pakistan lives in Kutuchi abadis on encroached land without title and consequently little access to basic public services .Thus the predicted reallocation of labor has not taken place in case of Pakistan while the proportion of urban population has more than doubled from 18% in 1951 to 38.8% in 2023, with annual growth rates of 4.9% 1951-61, 3% 1998- 2017 and 3.7 % 2007-23.

The growing menace of encroachment of fertile agriculture land close to urban and peri urban areas and on the sides of motorways and highways by housing societies and urban developers would not have been a matter of concern if overall land productivity had been rising. The matter of fact is that the small and medium farmers are still stuck in low level equilibrium and are therefore willing to sell their plots of land . This menace can only be controlled by effective local governments with their planning, zoning and enforcement tools.

We have now a stock of population and we have to deal with it. . i.e. to minimize political pressures for overstating population estimates, freeze the population results for next twenty five years for constituency delimitation and NFC award while reducing the weight of population and incorporating Population control outcomes in the allocation formula. The future strategy should consist of two pronged approach (a) Integrate population planning into the national priorities matrix and adopt a multi sectoral and whole of the Government approach to reduce TFR with targets , timelines and responsibilities and (b) prepare and promote Manpower exports to the advanced countries with ageing population.

DEMOGRAPHIC CHANGES

On the positive side, there are some global demographic changes which can prove beneficial to Pakistan. World Population growth doubled from 2.5 billion in 1950 to 6.1 billion in 2000 but the rate of expansion has started declining gradually since then adding about 2 billion people in the next twenty five years ..The populations of 61 countries are expected to drop by at least 1 percent between now and 2050. The replacement age of 2.1 children per worker has fallen below this benchmark in Japan, Korea, Russian, Germany and is likely to follow soon in other western European countries . These countries would need two working age persons for each senior citizen. Under these circumstances, the countries faced with ageing population won't be able to maintain their present standards of living as sustained growth requires both increase in labor supply and gains in labor productivity. The pressure on public finances in form of social

security benefits , rising cost of health care and low tax collection due to lower rates of labor force participation are making these countries rethink about migration of workers from surplus labor countries. Despite the hue and cry in Europe and the US the migration to these countries has in fact intensified in recent years. Ethnically and linguistically pure countries such as Japan, Korea, have opened up their doors to foreign workers. This demographic transition has opened up opportunities for labor surplus countries with youthful population for gainful employment overseas. So far the migration out of Pakistan has been largely towards the Gulf countries and 40-50% of incremental Labor Force migrates overseas every year providing a cushion to the employment situation in Pakistan and improvement in living standards of the families of the migrants. . Studies show that districts with higher emigrations rates show improved living standards and investment in human capital as reflected in lower scores on Multi Dimensional Poverty Index MDPI. Jhelum, Chakwal, Pindi have highest scores in Education index, lower Gini coefficients, low poverty head count. However, moving ahead and diversifying the pool of destination countries to include the Advanced countries ,would require concerted efforts to invest in our youth to acquire specific skills required by the host countries, learn their languages , familiarize with their culture, improve their work ethic and remain disciplined. The competition from the neighboring countries is likely to be quite tough and therefore their acceptability in the host countries would depend upon these preparations and prerequisites . Government at the federal, provincial , private sector and academic institutions would have to work collaboratively and institutions such as NAVTEC , TEVTAs in the provinces, OEC and Bureau of Emigration have to adopt a coordinated approach rather than working in isolation.

GENDER GAP

It is now empirically established that female education and female empowerment are key determinants of population growth. In Bangladesh, it has been observed that social returns on

reproductive health programs have many facets beyond fertility reduction-women's health's, earnings, household assets, environment, schooling of the children, better nutrition etc.

It is true that there is a gender gap in Pakistan's workforce which is proving to be an impediment in the way of inclusive , sustained development of the country. With 23% female labour force participation that too dominated by unpaid family workers in the agriculture sector the urban female work force in formal economy is quite low. The paradox is that females excel in education at all levels for example 80 percent of seats in medical colleges are won by the females on merit. However, only 30 percent of the female graduates go on to work in the profession.. I have found that the female workers' performance on the job as well as during the studies is far superior than their male counterparts. At IBA ten or eleven out of twelve on the Dean's list used to be girls. However, their representation in job market was relatively low. This is a huge waste of talent and misallocation of human resources. Social norms, family pressures, concern for safety and security , mobility, work force place environment , discrimination in hiring , career progression and wages act as the major deterrents for their entry into the job market and continuation. I have been told of instances where the employers refused to hire the females on the pretext that the company would invest in their training and coaching and the females would quit after they get married. . Policy actions where the employers provide pick and drop facilities, have day care centres in the premises, flexibility in working from home, generous maternal leave would promote their participation. As economic conditions become hard, two family income would be a boon. Technological innovations such as telehealth are already encouraging the female doctors to work from home. However social norms particular those of in-laws have to be altered drastically .

HUMAN CAPITAL

Human Capital encompasses a much broader concept than Human Development as it is more aimed at raising productivity, earnings and economic growth. The essential components of Human Capital Index (HCI) are (a) Expected Learning adjusted years of schooling by age 18 (b) Stunting and Adult survival rate (c) Under 5 mortality. HCI reflects the proposition that improved physical strength enabling greater work effort as well as the effects of better health and better cognitive skills are rewarded with higher wages. There is a close link between human capital index and the future income levels and growth rates. In Knowledge economy the nexus between Human capital and Technological advances is going to be much stronger.

The channels through which human capital affects growth are

- a) Direct contribution as a factor of production
- b) Its influence on technical progress through assimilation and application
- c) A proportion of human capital invested in knowledge generation goes in indefinitely because the returns to human capital do not diminish
- d) Positive externalities

What type of human capital is necessary to develop this type of growth---- Literacy, secondary and tertiary education, specialization. We, in Pakistan, are confronted with serious challenges such as stunting, out of school children, literacy poverty, low enrolment in technical and vocational training institutions, sporadic attention to STEM subjects at school level, higher education having little relevance to the economic problems of the country, minimal allocation for Research and Development by both the public and private sectors and wide regional disparities in education and health attainments. The solutions to these problems are well known and pilot projects have been successfully undertaken to tackle each of these problems but mass scale systemic replication of these experiments has yet to be seen. Unless that happens we would

remain laggards in the global knowledge economy. Just to give a simple illustration of the benefits of this investment ,On average an additional year of schooling is associated with about 10 percent increase in earnings. Growth is positively associated with lower material mortality rate and total fertility rate, and higher female enrolment relative to those aged 15 plus. Increase in social spending is positively correlated with growth. Human capital accumulation and skill formation, involve long process of life cycle learning.

To conclude, higher fertility rates combined with poor governance and institutional decay have seriously impaired sustained and rapid economic growth in Pakistan. Population control, Investment in Human Capital and Gender Gap are interrelated with positive externalities and they should be tackled in a carefully planned both sequential as well as simultaneous ways adopting a Whole of Government approach and full participation of the private sector as well as Civil Society organizations.