

POPULATION OF BANGLADESH: IMPACTS ON NATIONAL SECURITY

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Introduction

“We used to live in a world where the price of resources came down steadily, and now the world has changed. You have a great mismatch between finite resources and exponential population growth.”

- Jeremy Grantham

Population is a nation’s greatest resource. What greater asset can a nation have than a multitude of able-bodied citizens ready to stake its furnaces, work its factories, run its machinery, harvest its crops, build its cities, raise its children, produce its arts, and provide better services those make a nation prosperous. Nevertheless, unplanned growth of population and extreme land scarcity make Bangladesh one of the densely populated countries in the world, offering a fear-provoking scenario and undermining the successes of its demographic shift which largely affect the national security of the country. This high density of population is partly, if not largely, a phenomenon. For instance, between 1970 and 2010, Bangladesh’s population was increased by 192%.

Bangladesh being a developing country, many problems are hindering the national security of the country. Bangladesh ranks among the globe’s most densely populated countries with considerably high poverty rates.¹ The huge population is one of the major challenges, which is also a growing security threat. With the increase of population, the arable lands of Bangladesh is depleting; posing threat to food security. In a densely populated country like Bangladesh, high population can clutter per capita income, employment generation and a number of other issues related to growth, development and security.² An estimation of the population of Bangladesh indicates that it will reach 222.5 million by 2050. If the population growth reaches to 222 million in next thirty five years and the arable land keeps diminishing at the present rate (at 0.7%), which is further

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1. Liotta, P.H. & Miskel, James F. 2012, *The Real Population Bomb: Megacities, Global Security & the Map of the Future*, Pentagon Press, New Delhi.
 2. A lecture on “Security of Small States” by Ambassador Munshi Faiz, Chairman, BIIS presented to NDC 2016 on 21 July 2016.

threatened by the Green House Effect, Bangladesh is going to be a demographer's nightmare.

In this context, the question is whether Bangladesh is in a position to convert its "demographic window" into "demographic dividend." Thus, without pragmatic solution to population growth, Bangladesh cannot expect to achieve a sustainable economic growth, social peace and its citizen's food, health and environmental security.

Review of the challenges of high population growth, population policies of the government of Bangladesh viz-a-viz other socio-economic development policies and their relationship to all facets of national security are essential to identify possible areas those require more attention or restructuring. If not identified and appropriately addressed in time, such latent inadequacies may become monumental security challenges in the days to come.

Demographic Scenario, Trend and Pattern of Population Growth in Bangladesh

Trend and Pattern of Population Growth in Bangladesh

Trend of Population Growth in Bangladesh: Except the decade 1941-51, there was a steady increase of population from 26.81 to 111.50 million during the 100 years period of 1891 to 1991. Population stood at 130.03 in 2001 and 161.96 million in 2016. The Vision 2021 of the GoB predicted that the population of Bangladesh will exceed 169 million by the end 2020. Following this trend, the population of Bangladesh in 2050 is projected (average) to 200 million.

Characteristic and Other Issues of Population Growth in Bangladesh:

Based on the assumptions regarding the future course of fertility, three population projection scenarios are considered, which are labeled as 'high', 'medium' and 'low' variants. The high scenario considered in this projection is to see the possible consequences if fertility continues at its present level, the medium scenario is the most likely to happen, and the low scenario is the wanted fertility rate as reported in the BDHS 2011.

Birth Rate and Growth Rate: The population of Bangladesh at 24 July 2016 is 163.040 million.³ Present birth rate is 21.61 births/1,000 populations and growth rate in Bangladesh is 1.20%. It is the 8th most populous nation in the

3. Countrymeter, op. cit.

world. In 1951, the population was 42 million. Bangladesh had high rates of population growth in the 1960s and 1970s. Since then growth rate is declining as the total fertility rate is reducing. The rate of total fertility has declined from 6.3 per women in 1975 to 2.3 in 2014 with increasing contraceptive prevalence rate from 7.7% in 1975 to 62.4% in 2014.⁴

Age Structure, Youth and Old Aged Population: The average age of Bangladesh population is 24.5 years. A large number of young people i.e. 20.1% are aged 15-24 years. The percentage of total population by working age groups is increasing over time.

Level and Trends in Mortality: Under-five mortality for male is 48.15 and female is 43.09 per 1,000 births. The infant mortality rate is 43 per 1,000 and the child mortality rate is 11 per 1,000. It is evident that between the periods 1993-94 and 2015, neo-natal mortality declined from 52 to 28 per 1,000. More impressive are the declination in infant mortality (87 to 38) and Under-5 mortality (133 to 46) over the same period.⁵ Maternal mortality was decreased by 40% during the last 9 Years.

Fertility Levels and its Trends in Bangladesh: Currently women in Bangladesh have an average of 2.45 children. Women in urban areas have 2.0 children on average and 2.5 children per woman in rural areas. Women with no education have an average of 3.0 children and 2.3 among women who have completed secondary school or higher. The underprivileged women have an average of 3.2 children and wealthy households have 2.2 children.⁶

Key Challenges for Controlling Unplanned Population Growth

Early Marriage and Pregnancy: In spite of setting minimum legal age for marriage (18 years for girls and 21 years for boys), early marriage, especially among female adolescents, is prevalent in Bangladesh. About 11 percent within the age group of 10-14 years and 44 percent of 15-19 years are being married. Marriage at earlier age is common in rural areas, where about 85 percent of the girls are married before they reach the age of 18. Increasing trend of dowry, lack of safety and security of young girls are some of the reasons for continuing early marriage.

4. BDHS 2014

5. *ibid.*, p. 103

6. *ibid.*, p. 51

Lack of Education: It has been identified that, the population growth rate among the educated people in Bangladesh has come down by a considerable extent. On the contrary, growth rate among the uneducated/under-educated citizens is still double the rate of the educated group. Sometimes, the lack of education or bloomer on religion acts as catalyst for early marriage and unplanned birth. Women's education shows a strong positive association with age at marriage. For example, women who have completed secondary or higher education marry almost five years later than those with no education.⁷

Poor Economic Condition: Since the poor people have no steady income and many practically live hands to mouth, they customarily want more children as security and possible support during old age. They are also apt to get married early and produce children that they can't educate or even support.⁸ On the other hand, age at marriage increases with household wealth.

Lacks in Women's Empowerment: One-third women of age 15-49 are employed and earn cash. 80% of them, who earn cash, may decide with their husbands how their earnings are spent. 56 to 64% of women participate in decisions concerning their own health care. A woman's desire and ability to control her fertility and her choice of contraceptive method are affected by her status in the household and her own sense of empowerment. Therefore, women who participate in household decisions are more likely to use FP than who participate in no decisions.

Impacts of Population on National Security of Bangladesh

General Impacts

Population may have the multidimensional impacts on national security including the substantial adverse impacts on the environment of earth. It places competitive stress on the basic life sustaining resources, leading to a diminished quality of life. There are also economic consequences of this environmental degradation in the form of services attrition. Some adverse impacts associated with or exacerbated by population are mentioned below:⁹

- High rates of infant mortality caused by poverty.
- Intensive unplanned industrialization and farming to support the large population.

7. BDHS 2014, op. cit. p. 41

8. "Security of Small States", op. cit.

9. Wikipedia, Overpopulation, <<https://en.wikipedia.org/wiki/overpopulation>>

- Increased chances of emerging new epidemics and pandemics.
- Poor living conditions, malnutrition and inadequate health care.
- Starvation, malnutrition or poor diet with ill health and diet-deficiency diseases.
- Possibility of poverty coupled with inflation.
- Unhygienic living conditions for many based upon water resource depletion.
- Elevated crime rate due to drug cartels and increased theft by people to survive.
- Conflict over scarce resources and crowding, leading to increased levels of crime.

Security Impacts of Population

Impacts on Education: The ever growing population is creating a continuous pressure on the educational institutions. The ever increasing pressure to get a quality education is giving birth of many immoral practices. The quality of education is getting deteriorated day by day. Students in almost all residential hostels are living in overcrowded rooms, which have inadequate facilities for study and accommodate them. Most of the private universities of Bangladesh are not providing the excellence of education instead those are more of a business centers. These deficiencies are particularly frightening in case of technical institutions (like engineering, medical, vocational studies) which can be of great peril in future.

Unplanned Industrialization and Related Impacts on Environment: The positive economic and social results of industrial growth is accompanied by serious demographic and environmental degradation, as well growing threats to health from occupational hazards. The productivity of the industries depends on the supply and quality of natural and environmental resources. While water, soil, air, forest and fishery resources are productive assets, the pollution of water, air, atmosphere and noise are the by-products of economic development, particularly industrialisation.

Reduction of Arable Lands and Impacts on Food Security:

- Bangladesh has a primarily agrarian economy with agriculture contributing about 16.33% of the country's GDP and employs around 47.5% of the total labor force.¹⁰ Bangladesh has 8.774 million hectares of cultivable land, of which 88% is cultivated, so there is a limited scope to expand the cultivated area.¹¹ Bangladesh has 8.5 million hectare cultivable land with 15.18 million farm holdings. The cropping pattern is yet to be improved.¹² Bangladesh produces 37.266 million metric tons of food, which is barely enough to meet the requirements of the present population. Further population growth therefore requires increase in agricultural outputs. Meanwhile, cultivable land decreases at the rate of about 1% annually due to infrastructural, industrial, residential and other socioeconomic development activities.¹³
- It is evident that from 1975 to 2010 food production increased more than threefold against a population growth of little over two fold. Still, the average daily per person calorie intake hardly exceeds 2,000 kcal, compared to desired level of 2,400 kcal. Moreover, food security is a challenging issue since floods, droughts and storms disrupt crop production. The country need to import about 2 to 5 million tons of food grains annually depending on domestic production and requirements.¹⁴

Impacts on Employment Opportunities: In the context of growing economy of Bangladesh, jobs have been created as a natural outcome of economic growth. But the number of hands has outgrown the number of jobs. The labour force is increasing by about 2 million annually, adding to a backlog of 2.7 million unemployed and 11 million underemployed people. Thus, a vast pool of unemployed people engorgement the urban centers, putting pressure on infrastructure, traffic, gas, electricity, environment and other utilities. Some of them are getting involved in crime and violence jeopardizing the social security.¹⁵

10. Ministry of Agriculture, 2016, < <http://www.moa.gov.bd/site/page/4fb627c0-d806-4a7e-a1cd-b67d4bc85159/>>

11. Streatfield, Peter K and Zunaid A Karar, 2008, Population Challenges for Bangladesh in the Coming Decades, Journal of Health Population and Nutrition, PMC2740, September, P. 268

12. Begum Matia Chowdhury, Minister for Agriculture of Bangladesh, as mentioned during her lecture on "Agriculture in Bangladesh Economy" to NDC 2016 on 26 April 2016

13. Ministry of Agriculture, 2016, op. cit.

14. Export and Import of Agricultural Products_Chapter-11, <<http://www.bbs.gov.bd/PageWebMenuContent.aspx?MenuKey=234>>

15. Population Problem of Bangladesh - "Assignment Point" Report, <<http://www.assignmentpoint.com/arts/modern-civilization/report-on-population-problem-of-bangladesh.html>>

Impacts on Environment and Health: The ever growing trend has already turned Bangladesh into one of the most densely populated country. As a result, resource depletion and men induced environmental degradations like deforestation, internal migration, unplanned industrialisation and urbanization are compounding the situation further. With the growing population, lack of employment in rural areas, creation of new jobs at urban areas, rural-urban migration has been increasing quite rapidly.

In 1970, the urban population was only 7.6% of the total population, whereas in 2010 it has increase to 28.1%. In 2020, it is projected to 33.9% and by 2040; around 50% of the total population would be living in the urban areas. At present, 40% of the city dwellers are residing at slums. Providing basic amenities like basic health care, water, sanitation, hygiene to these people will be a great challenge. The major causes of urbanization include rapid growth of population and lack of employment opportunities in rural areas, expected higher income and better living in urban areas, losing land and wealth in natural disasters. These migrants are putting pressure on accommodation, infrastructure, traffic, gas, water, electricity, environment and other utilities.

Thus, the high concentration of population in urban areas poses threat to environmental, healthcare and social security.

Impacts on Nutrition and Child Health:

- Under nutrition includes growth restriction of the child in mother's womb, low birth weight, malnutrition, micronutrient deficiencies. It seriously impairs children's physical growth and mental development. A child suffering from malnutrition is likely to grow into an undernourished adult who will not be able to contribute adequately to the society and to national development.
- Half of all infant and young children suffer from anemia. On the other hand, approximately 16.5 million women of childbearing age suffer from the same disease. Their infants are also likely to suffer from low iron stores and become anemic. Anemia results in poor body defence against infection, lower physical work ability, poor physical growth and impaired learning.

Species Extinction: Human beings are currently causing the greatest mass extinction of species at rates 1000 to 10,000 times faster than normal. The 2012 update of the threatened species shows that of the 63,837 species examined worldwide, 19,817 are threatened with extinction - nearly a third of the total.

In Bangladesh, the rapid and unplanned industrialisation and urbanisation causing the extinction of species almost at the same rate. If present trends continue, scientists warn that within a few decades, at least half of all plant and animal species on earth will be extinct, as a result of climate change, habitat loss, pollution, acidifying oceans, invasive species, over-exploitation of natural resources, overfishing, poaching and human population.¹⁶ Human population has been dominating planetary physical, chemical, and biological conditions and limits, with an annual absorption of 42% of the Earth's terrestrial net primary productivity, 30% of its marine net primary productivity, 50% of its fresh water, 40% of its land devoted to human food production, up from 7% in 1700, 50% of its land mass being transformed for human use and atmospheric nitrogen being fixated by humans than all other natural processes combined.¹⁷

Impacts on Water (Surface and Subterranean) Security: Water shortage is already alarming in many countries and is likely to get worse in the coming years due to rapid urbanization and population growth. Shortage of sweet water is one of the major challenges of Bangladesh also. Irrigation coverage is around 63% and Bangladesh is heavily dependent on groundwater irrigation. About 80% of our cultivable land is irrigated by ground water. And irrigation efficiency is very low, only 30%. In rice, High yielding varieties covers 80% while hybrid is only about 18%. Rice, the dominating crop largely determines the progress in the sector consisting of 62% of the total value of crop output.¹⁸ At present, water availability of Bangladesh is around 90 BCM during the dry season against the demand of about 147 BCM.¹⁹ This results in drought and affects the agriculture badly.

Impacts on Social Security: According to 2016 population census, percentage of people aged 65 and above was 4.7%.²⁰ Due to declining birth rate and increasing life expectancy at birth, this figure will reach at 8% in 2020, while life expectancy will be 72.9 in 2020 and 73.1 in 2025. As the age groups are divided into four categories, namely, 0-14, 15-59, 60-64, 65+ years, the labour force is defined by age group 15-59 which is very important for measuring a country's workforce. Table 8 states that labor force participation is quite high over the projected years. In 2061, the projected labor force seems to be near about the total population

16. IUCN Red List of Threatened Species, <<http://www.iucnredlist.org/>>

17. Human Population Growth and extinction, <http://www.biologicaldiversity.org/programs/population_and_sustainability/extinction/index.html>

18. Begum Matia Chowdhury, op. cit.

19. Muniruzzaman, Major General (Retd) ANM, ndc, psc, 2013 "Food Security of Bangladesh: A Comprehensive Analysis", Peace and Security Review, Bangladesh Peace and Security Studies, Volume 5, Number 10, Second Quarter, Dhaka, p. 55

20. countrymeter, <<http://countrymeters.info/en/Bangladesh>>

of 2011. However, it will be a huge challenge to deal with the issue of increasing number of elderly in coming day. Providing old-age pension and other social security support these older people will become difficult.

Having discussed the security impacts of population, it is to be mentioned that Bangladesh has made outstanding progress in MDGs achievement, particularly making the demographic dividend. Bangladesh has already met several targets of the MDGs like reducing headcount poverty and poverty gap ratio, reducing the prevalence of underweight children, attaining gender parity at primary and secondary education, under-five mortality rate reduction, containing HIV infection with access to antiretroviral drugs, children under five sleeping under insecticide treated bed nets, cure rate of TB and others. In addition, Bangladesh has made remarkable progress in, increasing enrolment at primary schools, lowering the infant mortality rate and maternal mortality ratio, improving immunization coverage and reducing the incidence of communicable diseases.

On the other hand, areas in need of greater attention to achieve the SDGs are hunger-poverty reduction and employment generation, increases in primary school completion and adult literacy rates, ensuring quality education at all levels, creation of decent wage employment for women, increase in the presence of skilled health professionals at delivery, increase in correct and comprehensive knowledge on HIV/AIDS, increase in forest coverage, and coverage of Information and Communication Technology.²¹

Suggested Measures for the Management of Population to Ensure the National Security of Bangladesh

General: Having reviewed various sectors that affect population growth, this part of the research proffers some measures, may not be exhaustive, for the management of Bangladesh's population growth to enhance national security.

Good Governance in Implementing Various Policies: National security of Bangladesh is contingent on the government's implementation of good governance in the public domain, the maintenance of law and order by law enforcement agencies and the ability of state and non-state actors to effectively address human rights issues. Good governance also guarantees political security, which is the foundation for national security.

21. MDGs, Bangladesh Progress report 2015, Bangladesh Planning Commission, GoB, September 2015, p. 35.

Effective Implementation of Bangladesh Population Policy (BPP): The BPP National Population Policy remains the framework for the management of population growth in Bangladesh. The policy has been evolved over the last four decades and has significantly controlled the population growth rate.

Creating Community Interactive Structures: Through institutional community interactive structures, community consensus can be generating in favour of policies and programs. For this purpose, community facilities should be put in place to facilitate meetings, promote exposure to media through provision of newspapers, books, radios and television as well as organizing cultural events. Once instituted, communities can be involved in vetting policies and programs including those on population. Such organized community efforts can be a powerful legitimizing force for raising literacy and education, girl's education, women's role in society, addressing maternal health needs, awareness about health and adverse consequences of early marriage and early child bearing.

Overseas Employment Opportunities: Development of Skilled/Semi-skilled Workforce

- Since 1976 to June 2013, about 8.6 million Bangladeshis migrated overseas for employment and remittances have increased USD 13832.13 million. According to, IOM, Dhaka, Bangladeshi migrants are categorized into low-skilled (51.87%), semi-skilled (15.28%), skilled (32.68%) and professional (0.17%).²² It was further observed that some of the skilled expatriates such as nurses are not adequately remunerated due to their inability to speak English.
- To enhance the skills of the intending expatriate workers, BMET provides institution based vocational and technical training in different employable trades in Technical Colleges at the Upazilla level.²³ Nevertheless, most of the expatriate workers are still unskilled and deficient in foreign languages because the technical schools are inefficient.²⁴ Despite the laudable socioeconomic benefits of the international migration, a potential danger is the possible exposure of the migrants to extremism that may degenerate into importation of terrorism to Bangladesh. Should this happen, it would threaten the National Security of the country.²⁵

22. IOM, Dhaka, < <http://www.iom.org.bd/page/facts-and-figures/> >

23. BMET, <<http://www.bmet.org.bd/BMET/trainingHomeAction>>

24. Dr Gowher Rizvi, Adviser to the Hon'ble Prime Minister, mentioned in his Keynote speech: The Foreign Policy of Bangladesh, at NDC on 11 July 2016

25. IOM, op. cit.

Involvement of Non-Government and Private Organizations in Population

Program: To be more effective, it is essential to include the Non-Government and Private Organizations in addition to the ministries and institutions as partners in population planning and development programs whose target groups are heavily affected by growth of population. In this regard these organisations can play fruitful roles within the scope of their own activities.

Education: The government of Bangladesh has introduced various laudable policies to enhance the education sector and they are yielding positive results. In any event, non-coercive approaches to population reduction emphasizing improving standards of living, economic security, education, gender mainstreaming and health care may promise reduction of growth rate to the replacement level. It is particularly important to retain girl students in schools until physical and emotional maturity to understand the implications of early marriage and early child bearing.

Public Health: The challenge of the population bulge requires the health sector to be revamped and broadened in a major way, as the aging population requires greater medical care. Primary health centres and specialized hospitals need to be built in larger numbers. Similarly, the health of women in reproductive age as also those engaged in the labour force need proper attention.

Women Empowerment: Like most developing countries, the women of Bangladesh folks are not considered equivalent to men in terms of status, force and might. Such opinions are extremely common in some other Islamic countries and even India and Bangladesh. Gender discrimination is one of the major reasons for unplanned population growth. People keep giving birth to kids in order to have more sons than daughters to have an illusion of future economic security. Empowering woman with a say in matters concerning them like maternity health, child birth and educating them to fight against discrimination will ensure a healthy and aware society.

Recommendations

Considering the foregoing discussions, findings and analysis, following recommendations are put forward for the management of population to enhance national security of Bangladesh:

- Public health sectors to be revamped and broadened to ensure the adequate support to the women at reproductive ages, child and maternity health, and the medical care for the aging population.

- For the implementation of BPC and other related policies, following aspects should be given due importance:
 - Demographic transition should be created through educating the people, enhancing women empowerment, employment generation, economic development and poverty reduction.
 - Provision for marriage license may be introduced before getting marriage including mandatory training on birth control methods.
 - The legal age of marriage for women in Bangladesh is 18 years, but a large proportion of marriages (59%) still take place before the woman reaches her legal age. GoB may increase the minimum age of marriage and ensure strict compliance.
 - Targeting family-planning programs to high-parity families and those at high risk of unintended pregnancies, emphasizing longer-term methods for family planning.
 - Recruiting appropriate numbers of committed and skilled manpower at field-level, developing a comprehensive training curriculum and organize training for developing the communication/counseling skills of providers at various levels.
- Generation of large-scale employment opportunities both at home and abroad is required to ensure gainful employment of working age group to avoid social tension and anarchy. Existing education system, technical and vocational training facilities should be enhanced to develop the skilled and semi-skilled work force with language proficiency.
- Government needs to pursue the policies strongly that will guarantee socio-economic development of the people and the benefit of the larger society. Strategies put in place to manage population growth must be implemented and enforced effectively.
- Since agriculture constitute approximately 13% of Bangladesh's GDP and employs 47.5% of total labor force, greater emphasis must be laid on research and development, particularly by BRRRI and BADC, for producing genetically modified crops with better yields and salinity tolerance.²⁶ Training to the farmers is also necessary to ensure food security and improving their lifestyle.

26. A lecture on "Agriculture in Bangladesh Economy" by Begum Matia Chowdhury, Minister for Agriculture of Bangladesh, at NDC 2016 on 26 April 2016

Conclusion

The overall effect of the population growth which led to a demographic shift of creating an energetic and young working-group population. This demographic shift, which has become a ‘demographic dividend’ for Bangladesh needs to be managed appropriately to ensure it does not become a ‘demographic liability’ in the near future. As the present growth rate of 1.2%, the replacement level of fertility will be attained by the year 2020. At that situation, the population of Bangladesh would stabilize at not more than 220 million by the year 2050 due to the population momentum. This is likely create a huge burden on the national resources and impact adversely on the living standards of the people, there by effecting negatively on the national security of the country.

Against the backdrop of high population density, growing urbanisation, increasing threat of climate change, it is crucial for Bangladesh to formulate policies and strategies to effectively manage its huge population. At the same time, rigorous steps should be taken for the effective implementation of those strategies. The government should take necessary steps to expand the activities of satellite clinic for satisfying mother-child health care at village level. Urgent government intervention is required to incorporate the eligible couples living at slums, barrages, char-land and remote areas within the realm of service provision.

Another demographic phenomenon that demands an immediate response is the rural-urban migration. The future of rural agriculture suggests that Bangladesh is close to the limit of availability of agricultural land and productivity, at least in the short-term. The inevitable consequence of the situation will be urbanisation on a scale which risks overwhelmingly the capacity of the urban authorities to provide housing, water and sanitation, healthcare, education, and other essential services to incoming migrants. A recent study and mapping of slums indicates that they are growing at over 7% per annum, implying a doubling time of less than a decade. This frightening scenario requires an immediate strengthening of urban planning and consideration of how to slow the pace of movement away from rural areas.²⁷

Some of the appropriate measures have been proffered for the effective management of population growth in Bangladesh. These were Good Governance in Implementing Various Policies, proper education, Creating community interactive structures, coordination between the implementing agencies, creating more overseas employment opportunities by developing skilled/semi-skilled workforce, ensuring public, maternity and child health and so on.

27. Peter Kim Streatfield and Zunaid Ahsan Karar, op. cit. p. 12

Effective leveraging of the demographic dividend depends on numerous factors like good governance, macro-economic management, efficiency of financial markets, and effective policies in the field of trade, education, health and labour. The approach will determine whether it takes the right path or not. Demographic dividend does not last forever, as it is a limited window of opportunity. With the right policy framework for job creation, skill development, proper healthcare, and establishment of strong financial systems, Bangladesh can capitalise on this transition.

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List of Abbreviations

Abbreviations	Meaning
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARI	Acute Respiratory Infection
ASA	Association of Social Advancement
ASFR	Age-Specific Fertility Rates
BADC	Bangladesh Agricultural development Corporation
BBS	Bangladesh Bureau of Statistics
BCM	Billion Cubic Meters
BDHS	Bangladesh Demographic Health Survey
BMET	Bureau of Manpower, Employment and Training
BMMS	Bangladesh Maternal Mortality Survey
BMTF	Bangladesh Machine Tools Factory
BPP	Bangladesh Population Policy
BRRI	Bangladesh Rice Research Institute
CBR	Crude Birth Rate
CDR	Crude Death Rate
CPD	Centre for Policy Development
CRNI	Crude Rate of Natural Increase
DACMO	Deputy Assistant Community Medical Officer
DD	Deputy Director
ESP	Essential Services Package
ETF	Education Tax Fund
FAO	Food and Agriculture Organisation
FP	Family Planning
FPA	Family Planning Activities
FWA	Family Welfare Assistant
FWI	Family Welfare Inspector
GDP	Gross Domestic Product
GoB	Government of Bangladesh
HNPSP	Health, Nutrition and Population Sector Programme
HPNSDP	Health, Population and Nutrition Sector Development Programme
HPSP	Health and Population Sector Programme

Abbreviations	Meaning
HR	Human Resource
HDI	Human Development Indicator
IMR	Infant Mortality Rate
IOM	International Organisation for Migration
IST	Internal Study Tour
IUCN	International Union for Conservation of Nature
MDG	Millennium Development Goals
MOHFW	Ministry of Health and Family Welfare
NASP	National AIDS/STD Programme
NCD	Non-Communicable Diseases
NGO	Non-Government Organization
NDC	National Defence Course/ National Defence College
NEP	National Education Policy
NIPORT	National Institute of Population Research and Training
NIC	National Intelligence Council
NPC	National Population Council
NPP	National Population Policy
NRR	Net Replacement Rate
NYSC	National Youth Service Corps
PAI	Population Action International
PGR	Population Growth Rate
RWP	Ratio of Working Age Population to Total Population
SDG	Sustainable Development Goals
TB	Tuberculosis
TTTI	Technical Trade Training Institute
UESD	Utilization of Essential Service Delivery
UNESCO	United Nations Organisation for Education Science and Culture
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNFPA	United Nations Population Fund
UNPD	United Nations Population Division
WHO	World Health Organization

Author

Brigadier General Ashfaq Iqbal, ndc, afwc, psc was born on 30 June 1965 in Dhaka. He was commissioned in the Army Ordnance Corps on 19 May 1985. Besides serving in the various regimental appointments of Ordnance units/installations, he has commanded Central Mechanical Transport Depot, Ordnance Depot, Divisional Ordnance Company and Independent Ammunition Platoon. Brigadier General Ashfaq served in the Army Headquarters and Divisional Headquarters as the Assistant Military Secretary, Assistant and Deputy Assistant Director of Ordnance Services and Ammunition Technical Officer. He also served in Directorate General of Defence Purchase as Assistant Director Purchase (Army) and Ordnance Centre and School as Instructor Class B. He worked as Ammunition Technical Officer and Logistics Staff Officer in United Nation's Peace Keeping Operation in Mozambique (1994), Sierra Leone (2002) and Sudan (2010). He is a widely travelled person who toured many countries of Asia, Europe and Africa. Brigadier General Ashfaq attended number of training courses both at home and abroad. He attended Higher Ordnance Management Course in India in 1993. He is a graduate from Defence Services Command and Staff College and National Defence College. He has obtained degrees in Masters of Defence Studies (MDS) and Masters of War Studies (MWS) from National University and Bangladesh University of Professionals respectively. As Commandant, Central Mechanical Transport Depot, Brigadier General Ashfaq received "Chief of Army Staff's Commendation" twice for the brilliant achievements in command.