DEMOGRAPHIC DIVIDEND

Vs.

DEMOGRAPHIC NIGHTMARE

8th Dr.Chandrasekaran Memorial Lecture

delivered by

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Dr. Narendra Jadhav delivering 8th Dr. C.Chandrasekaran memorial lecture

I feel greatly honoured to have been invited to deliver the Dr. C. Chandrasekaran Memorial lecture today. I am grateful to organizers, for giving me this opportunity to pay my humble tribute to Dr. C. Chandrasekaran, who, as we all know, was one of the legendary scholars in the field of population studies in India.

Dr. C. Chandrasekaran joined the Indian Institute for Population Studies in 1959 and served with distinction till 1965. Dr. C. Chandrasekaran had exceptionally rich international exposure and experience. He had the unique distinction of being the first Indian to work in United Nations in its Population Division. He also served as Population Adviser in ESCAP, Bangkok and was part of the 1969 UN-WHO-IBRD mission to assist the Government of Indonesia to develop a comprehensive family planning programme. Moreover, he was associated with the World Bank and UNFPA as a Population Specialist. In addition, Dr. Chandrasekaran also had the honour of serving as the President of International Union for Scientific Study of Population (IUSSP). I would like to congratulate the authorities of this August Institution – International Institute of Population Studies, for instituting this Memorial Lecture Series honouring their legendary Director – Dr. C. Chandrasekaran.

For this 8th Memorial Lecture, I am going to share some thoughts on a subject of great contemporary relevance: Demographic Dividend Vs. Demographic Nightmare. I would like to present my thoughts on the theme as follows: First I propose to explain how,demographic composition of any nation plays an important role in the growth and development of the economy. Secondly, I propose to present an overview of the ongoing Indian demographic transition. Thirdly, I propose to discuss various dimensions of the so-called 'Demographic Dividend' and argue that if we fail to harness the potential 'Demographic Dividend', the situation might turn into a 'Demographic Nightmare'.

What is Demographic Dividend?

Global population has grown significantly during the last three centuries. In the growth process of any economy, demographic transition is inevitable. Experience worldwide suggests that demographic transition typically takes place from largely rural agrarian society to a predominantly urban industrial society. This demographic transition process is generally characterized by three phases: The first phase is largely represented by underdeveloped economies where fertility rate as well as mortality rate is high, given

the illiteracy, and predominance of agrarian economy and absence of universal health services. The second phase represents a situation where there is gradual emergence of non-agricultural sectors such as manufacturing and services with agricultural sector still dominating the scene. This phase is marked by early signs of industrialization and some improvement in health and education services. The rising level of income pushes up the birth rate but factors such as insufficient health facilities and inadequate food security generally mean high mortality rate as well. Countries going through this phase are typically labeled as 'developing countries'. In the third and final phase, population growth shows stagnation; in some cases, it even shows negative growth. As industrialization deepens, the literacy and income levels are strengthened. The improved infrastructure and strong backing of social security tends to lower the mortality rate. Contemporaneously the urge to maintain the improved lifestyle and keen competition in the job market, also means that individuals tend to refrain from increasing the size of family. As a result, the birth rate starts dwindling. The demographic transition, thus, typically occurs from the regime of high fertility and high mortality rates to low fertility and low mortality rates.

For many years, demographic studies were focused on the size of population rather than its composition. Policy makers as well as academicians debated on the issues relating to the size of population and their repercussions on the economy. The 18th century economist like Thomas Malthus, in fact, viewed population growth as an inevitable curse, which he thought, could be a major threat to civilization, if not checked in time. This view dominated the thinking until the early 20th century, and as such, avoidance of population explosion was one of the major issue on the agenda of most governments.

More recently, another view has gained ground viz., what is more important is the age structure and composition of the population and *not* its size. This view point is focused on the demographic structure from an altogether different perspective wherein the proportion of the working age group in the total population is deemed to be more important for framing the policies for economic growth and development. In this regard, the "bulge" appearing in the middle part of the population pyramid is seen to be advantageous in delivering what is popularly referred to as 'Demographic Dividend '.

Demographic Dividend thus refers to an actual or potential rise in the rate of

economic growth due to growing share of working class people in the overall population. This usually occurs in the late phase of the demographic transition when the fertility rate falls while the dependency rate declines. During this period of opportunity, output per capita tends to rise due to increase in production and comparatively less consumption.

The notion of Demographic Dividend runs contrary to the theory propounded by Thomas Malthus. Malthus had stated that the power of population is indefinitely greater than the power in the earth to produce subsistence for people. Since the population, when unchecked, increases in a geometrical progression and subsistence increases in an arithmetic progression, Malthus predicted catastrophic conditions, challenging the very existence of civil society. Critics of Malthusian theory, to whom Malthus called Utopian thinkers, refused to accept the grave prediction on the ground that, every mouth to be fed comes with two hands that can be put to work. It turns out that the Utopian thinkers had more faith in the survival instinct of the homo-sapiens and goodness of civil society. This perception of the availability of Demographic Dividend evidently pre-supposes appropriate development policy and conducive socio-eco-politico environment so as to harness the potential of Demographic Dividend.

Demographic Dividend for India

As per India's current demographic profile (NSS, 2004-05), population of the age group 0-15 was 1,128 million while that for the age group 15-59, it was 687 million. The growth rate in the age group of 0-15 was 1.43 per cent per annum while in the age group 15-59, it was 2.29 per cent per annum. The demographic pyramid is thus bulging at the center while narrowing at the top and bottom.

If we look at the future demographic pyramid of India, it is clear that, India is set to enter the phase of Demographic Dividend. In 2000, one-third population of India was below 15 years of age. By 2020, the average Indian will be only 29 years old, compared with 37 in China & USA, 45 in Western Europe and 48 years in Japan. In other words, the deceleration in population growth in India has been pushing down the dependency ratio (ratio of dependent to working age population) from 0.8 in 1991 and is expected to decline sharply to 0.59 by 2011. More and more women are entering the work force, further lowering the dependency ratio. This implies that there would be large and growing labour force, which can be expected to deliver large scale spin-off in terms of growth and prosperity.

This situation can possibly give India a leverage in the global market by improving competitiveness. Considering all these favorable and fortuitous developments, many analysts across the world have started predicting India as a strong contender for the position of a 'Global Economic Superpower'.

Is India really ready to seize this golden opportunity which nature is going to confer upon? Where do we stand today? Does India presently have adequate and appropriate mechanisms in place to absorb the potential gains in the form of Demographic Dividend? All these questions need be analyzed and addressed squarely.

Where Does India Stand?

The Human Development Report 2009 indicates that the Human Development Index (HDI) for India at 0.612 in 2007, placed India at the rank of 134 out of 182 countries in the world. In terms of gender related development index, India ranked 114 out of 155 countries in 2007. India's HDI rank of 134 was lower than its per capita GDP rank of 128, largely because of its low ranking on education and health. The uniform recall period (URP) consumption distribution data of National Sample Survey (61^{st} round) places the poverty ratio in India at 28.3 per cent in rural areas, 25.7 per cent in urban areas and 27.5 per cent for the country as a whole in 2004-05. The National Commission on Enterprises in Unorganized Sector, in its report, suggested that 77 per cent of the total population of the country in 2004-05, had per capita consumption expenditure of less than Rs. 20 per day. While the poverty ratio seems to have declined over time, malnutrition has remained high. Malnutrition, as measured by 'underweight children below 3 years' constituted 45.9 per cent of the relevant strata of India's population (National Family Health Survey 2005-06). Even worse, there is no significant change from its level of 47 per cent in 1998-99. These indicators do not augur very well in terms of our country harnessing the potential Demographic Dividend. Let's look at the situation in greater details with a longer term perspective.

India : A Longer Term Perspective

During the first three decades after Independence, the Indian economy stagnated around a trend grate of growth of 3.5 per cent, popularly known then as the *Hindu* rate of growth. The scenario changed during the 1980s. The acceleration of growth during the 1980s to 5.6 per cent per annum on average placed the Indian economy to a higher growth path. However,

the growth process of the 1980s turned out to be increasingly unsustainable as manifested in the growing macroeconomic imbalances such as high fiscal deficit, high levels of current account deficit, and increasing levels of external debt, besides a repressive and weakening financial system. All these culminated in an unprecedented external payments crisis in India in 1991. Economic growth fell to such a low level in 1991-92 that real per capita income declined and the country was on the verge of bankruptcy.

In response to macroeconomic crisis, a programme of stabilisation and structural adjustment was initiated in July 1991, with wide ranging reform measures encompassing the areas of trade, exchange rate management, industry, public finance and financial sector. Fiscal correction, exchange rate adjustment and inflation controls constituted the immediate measures for macroeconomic stability. These measures were supported by structural reforms in the form of industrial deregulation, liberalisation of foreign direct investment, trade liberalisation, overhauling of public enterprises and financial sector reforms. Apart from restoring the economic stability, the economic reform programme also aimed at achieving a higher growth trajectory through increased levels of investment, and improvements in productivity, efficiency and competitiveness.

The policy shifts of the early 1990s following the unprecedented balance of payments crisis of 1991, had given rise to apprehensions in various quarters that the very rubric of social justice built up assiduously over the years could be at stake in the pursuit of structural reforms. Alarms were raised in several circles that the new *mantras* of liberalisation, privatization and globalisation with their explicit emphasis on productivity, efficiency and market orientation would replace the age-old concerns for equity and justice, and, would possibly derail and dislodge the multitudes of welfare programmes designed for extending distributive justice. The resurgence of global integration in the 1990s, facilitated by revolutionary advances in information, communication and technology, was also widely believed in some quarters to have compromised the very sovereignty of nation states and thereby their ability to nurture and defend endeavours towards social justice.

The macroeconomic and structural reforms have been operational for over a decade and half. What is the balance sheet of our achievements and failures?

On the positive side, one can enlist at least three major achievements:

- Acceleration of economic growth

- Reduction in the incidence of poverty, and
- Comfortable balance of payments position.

On the flip side, one can identify at least three major shortcomings and challenges:

- Deceleration in the rate of job creation,
- Prevalence of high poverty ratio, and
- Inadequacy of social sector spending.

The real GDP growth rate has accelerated from 3.5 per cent per year until the 1980 to over 9 per cent per year in the three years ended 2007-08, making India the second fastest growing economy in the world next only to China. At the same time, while there has been a considerable decline in the poverty ratio during the 1990s, India continues to have a dubious distinction of housing the largest number of people below the poverty line in the world. Besides, wide inter-State disparities are visible in the poverty ratios across rural and urban areas as also in the rates of decline of poverty.

A disquieting development in this regard is a dwindling share of outlay on key social sectors like education, health and social safety nets as a proportion of the total expenditure of governments – the Centre and the States. While the total expenditure of the combined – Centre and States – has increased steadily, their expenditure for social services has gone up only marginally until recently. Illustratively, although the Kothari Commission had underlined way back in 1966 the need for enhancing the allocation for education sector to 6 per cent of GDP, education expenditure remained around only 3.5 per cent of GDP.

Not surprisingly, therefore, India's rank in terms of the Human Development Index (HDI) deteriorated to 127th in 2001 from 124th in 2000 in a group of 175 countries and has remained in that neighbourhood until 2007 as mentioned above. In comparison, the HDI ranks of some of the South East Asian countries were as follows: Sri Lanka (99), Malaysia (58), Thailand (74), Indonesia (112), and China (104). Clearly, in contrast to the South East Asia countries, India's development experience can hardly be said to have been equally successful in dovetailing the growth process with social empowerment at least until recently. Needless to say that unless corrected this would inevitably act as a major impediment on sustaining the growth momentum of India in future.

Since time immemorial, a large majority of the people, the so-called backward classes continue to be deprived of their rightful place in the Indian society. These communities together account for 78.1 per cent of the total population.

Arguably, they are also the majority among the people below the poverty line. The continuation of age-old division of labour along the rigid caste lines has no doubt given rise to the lack of flexibility and mobility, which is the very essence of the development process. If a large majority of the populace is denied the educational opportunities to build their productive potential and if the bulk of the society is denied the opportunities to channelise their potential into higher productivity – confining them instead to traditional menial jobs on the caste lines, how can we expect the nation to realise its own growth potential in a sustained manner? If we envision becoming an economic super power harnessing the Demographic Dividend we will have to succeed in maintaining the momentum of economic growth and sustained growth is possible only if the growth process becomes "inclusive" – with involvement of all strata of the Indian society. This calls for a considerable strengthening and reform of our education system and skill building mechanisms, to which we turn next.

Reform of Education and Skill Building

Education plays a vital role in the growth and development of any nation. Knowledge has come to occupy centre-stage in the development process with the realisation that a significant new relationship has emerged between knowledge and the economy. It is increasingly being recognised that countries with the capacity to generate new knowledge and skilled human power are likely to have to have a comparative edge in attaining high economic growth and sustaining their growth momentum over those that do not.

What education does essentially is to improve functional and analytical abilities of individuals. This opens up opportunities for individuals as well as groups to achieve greater access to employment opportunities and professional fulfilment. A better trained and educated labour force is a pre-requisite for meeting the labour supply requirements of sustained higher growth. Moreover, education is not only an instrument of enhancing efficiency but is also an instrument of socio-economic transformation; it is an effective tool of widening and augmenting demographic participation and upgrading the overall quality of individual and societal life.

The central agenda of many developing nations is to achieve social access and equity through education. The number of youth going for higher education is increasing in these countries. It is enhancement of the personal credibility and higher probability of acquiring gainful

employment that brings financial stability to a family, which has made higher education a prime necessity for every youth in the eligible age group. Therefore, there is a premium on both quantity (increased access) and quality (relevance and excellence of academic programmes offered) of higher education.

Let us have a glance at some relevant facts about higher education in India: India has probably the third largest higher education system in the world – after China and the USA, with 431 universities, 20,677 colleges, around 5,05,000 teachers, and over 116 lakh students. There are a number of educational institutions where standard of education is probably comparable to the best in the world and where outstanding research is being conducted in key areas. Yet, there are far too many challenges that we need to address.

What are the main challenges of the twenty first century with respect to higher education in India? I like to see higher education in terms of four main dimensions : access, quality, affordability and employability. Let's examine them in that order.

In the age group 18-23 years which is deemed to be the age group for higher education, the proportion of Indian youth that have access to higher education i.e., Gross Enrolment Ratio (GER), was around 11 per cent in 2005. This is exceptionally low in international comparison. For example, in US the GER in 2005 was as high as 83 per cent whereas even in EMEs such as China and Brazil, it ranged between 20 to 24 per cent. In India the problem of exceedingly low access to higher education is compounded further by multiple disparities such as the rural-urban divide, gender gaps (i.e., male-female) and social gaps (i.e., SC/ST and others, as well as Muslims and non-Muslims). Illustratively, within the overall average GER of around 11 per cent, for SC/ST group it was only around 6.3 per cent whereas for Muslims it was around 6.84 per cent. For female Muslims the GER was placed at only 5.8 per cent whereas for female SC/ST group, it ranged only between 4.43 and 4.76 per cent. If further sub-division is made on the basis of poor and non-poor, GER for poor SC/ST works out to only 1.55 to 1.89 per cent whereas for the poor rural SC/ST group it turns out to be at abysmally low levels of only 1.11 to 1.35 per cent. Accordingly, the first challenge that we need to address is to increase access to higher education generally, with special focus on the disadvantaged and marginalised strata of the society.

The second challenge is that of improvement in the quality of higher education. Quality is a very serious problem

with the existing system of higher education in India. There are two major aspects to this problem. One, the curricula of most courses in most of the Universities are seriously out of alignment and two, a discomfortingly large proportion of college teachers are blissfully unaware of the advances in their own subjects. Together these two issues have a perilous effect on the quality of higher education in India. Out of the 417 Universities in India, by March, 2008, only 140 i.e., around one-third of the total have been accredited by the National Assessment and Accreditation Council (NAAC). The results of the accreditation process also show that only 31 percent of them were graded 'A" while the remaining 69 per cent were placed in either 'B' or 'C' grade. Among the 20,676 colleges that existed in March, 2008, only 3,492 i.e., less than 17 per cent were assessed and accredited by the NAAC. Here again, the results are disconcerting: among colleges, only 9 per cent were graded e 'A' whereas the remaining 91 per cent colleges were graded either 'B' or 'C'. While the NAAC accreditation process is exceedingly slow, it has pointed out glaring deficiencies in availability of human resources in terms of the availability and quality of teachers and other infrastructural facilities. Indeed, studies have shown that on average 25 per cent faculty positions are vacant in Universities and as many as 57 per cent teachers in colleges do not have M.Phil or Ph.D. The culture of quality consciousness must grow in the education sector. Concerted efforts are therefore necessary to improve quality of higher education through faculty improvement programmes, academic staff colleges, and the National Assessment and Accreditation Council (NAAC).

Yet another dimension of higher education in India is affordability. We have a complex structure of higher educational institutions including State Universities, Central Universities, Deemed Universities and Private Institutions. The cost structure of higher education that is emerging especially in the private sector is very high and is virtually unaffordable for a very large mass of students. This is a very serious problem and in effect therefore, access to higher education is denied to very large strata of the Indian Society.

The fourth dimension of higher education is employability. In this regard the rift or the chasm between the evolving societal needs and the kind of higher education currently being imparted is widening. This raises the question of "relevance" of higher education that is being provided today. For example, a very good student from an excellent institution when

employed by a good employer needs several months of training to be able to be functional. In an IT company, typically, it takes on an average 8-10 months of vigorous *on the job* training before a student becomes functionally useful to the company. Training is certainly not a forte of these companies, but they have to do this to fully exploit the potential of their employees. Actually this should be a forte of educational institutions. This calls for a very substantial improvement in terms of University – Industry Interaction.

For a long time, skill development in India largely meant development of shop floor or manual skills. The NSS 61st Round results show that among persons of age 15-29 years, only about 2 per cent had received formal vocational training and another 8 per cent have received non-formal vocational training indicating that most young persons actually enter the world of work without any kind of formal vocational training. This proportion of trained youth is one of the lowest in the world. The global average is very high as compared to our existing scale average (i.e., Korea 96 per cent, Germany 75 per cent, Japan 80 per cent and 68 per cent in the U.K.) In India, nearly seventeen different Ministries/Departments of Government of India are imparting vocational training to about 3.1 million persons every year through Polytechnics and Industrial Training Institutes (ITIs). However, this effort is not sufficient, given the number of entrants to the workforce i.e., 12.8 million per year. Further, there are institutional limitations in the existing system. One, the unorganized sector which constitutes about 93 per cent of the workforce is hardly supported by any structured system of acquiring skills. By and large, skill formation takes place through informal channels only, with no linkages to the formal education. Secondly, (and alarmingly) 38.8 per cent of the Indian labour force is illiterate and about 80 per cent of the workforce in rural and urban areas does not posses any identifiable marketable skills. It is expected that in ageing global economies, skilled manpower shortage has been projected to be of the order 56.5 million by 2020. If India could upgrade the skills of its labour force, then globalization can potentially bring rich Demographic Dividend.

Prime Minister Dr. Manmohan Singh has instituted a Skill Development Mission, with Plan outlay of Rs. 22,800 crore, for mass and rapid skill development. The structure of the Mission consists of National Council on Skill Development; National Skill Development Co-Ordination Board; and National Skill Development Corporation. The apex body shall steer the Mission by

policy directions; Co-ordination Board shall coordinate between seventeen different Government Departments/Ministries for better utilization of resources and identifying focused areas while the Corporation set up by Finance Ministry shall act upon these issues in collaboration with private participants. This comprehensive exercise includes concerted efforts ranging from enhancing the quality of higher educational institutions by way of more stringent Accreditation System to refinement in existing skill building programmes like Apprenticeships offering the youth the much needed financial flexibility to learn while they earn.

The demographic dividend is certainly a window of opportunity. Since the demographic transition is a dynamic process, this window may not be available for a long time. Our own track record clearly shows that the States which are doing well in the field of education and skill building are generally progressive and prosperous. Also the democracy seems to have matured in such States and overall HDI is quite impressive, while those States which have lagged behind are beset with large scale poverty, unemployment, malnutrition, high child mortality besides political and social instability. Arguably, the communal disharmony and militant activities like Naxalism are largely manifestation of shortfall of policies which failed appreciate the due importance of education and Demographic Dividend. Imagine a situation when a large part of labour force is sitting with idle mind and empty hands. Under those circumstances, the social fabric is likely to be disturbed and threat to internal security will be accentuated. In other words, if we fail to harness the Demographic Dividend to our advantage, we shall prove the Malthusian theory, turning thus the potential Demographic Dividend into a Demographic Nightmare.

To conclude, education and skill building hold tremendous promise for reaping the Demographic Dividend for our society and democratic polity, just as it poses formidable challenges to policy making for socio-economic development of our country. Time is on our side if we take the stakes seriously, but not for too long. Education and skill building deserve more of the nation's commitment, attention and resources. While remembering Dr. C. Chandrasekharan, let us resolve to work together to harness the Demographic Dividend to make India an economic powerhouse in none too distant future.

Thank you!!!