

“Overview of Human Development in 2020 India”

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Abstract

India has a distinct comparative factor advantage as a vast reservoir of skilled manpower. The demographic differentials reveal that over the next 20-30 years, India has distinct advantages in a population profile concentrated in the younger age group, where many new opportunities can be fully optimized. Our vision of India's future should serve to awaken in all of us a greater awareness of our cultural and spiritual strengths - which formed the bedrock of our past achievements and should form the foundation of our future accomplishments. Some of our traditions must change, but knowledge, in essence, is our greatest endowment. The vision should awaken in us an unswerving confidence in ourselves, a complete reliance on our own capacity as a nation and an unshakeable determination to realize our full potential. A true vision cannot be a static written statement. It must emerge as a living and dynamic reality in the minds and hearts of the people and their leaders.

Well before 2020, India will have the capacity to produce more than sufficient quantities of food to provide a healthy diet to its entire population and become a major food exporter. Even by maintaining the moderate rates of productivity growth achieved during the 1990s, the country will be able to meet the projected demand in all major food categories and generate a substantial surplus of food grains and dairy products. Rising productivity and rapid diversification into value-added crops could spur another Green Revolution in Indian agriculture. General educations form the base of the knowledge pyramid which is essential for a rapid and sustained human development of the society in the 21st Century.

In this paper I would like to highlight that is the condition of human resource development, Food Security, Employment, Education, Health and Vocational Training in India of 2020.

KEYWORD: - Human Development, India

Introduction:-

In formulating our vision of the future India, it is important to see beyond the limits of the immediate past to rediscover the greatness that is India. Although the present Republic of India is a young developing nation, our people have a rich and illustrious history as one of the longest living civilizations in the world. In 1835, even the British historian and politician, Lord Macaulay, admitted before the British Parliament: "I have traveled across the length and breadth of India and I have not seen one person who is a beggar, who is a thief. Such wealth I have seen in this country, such high moral values, people of such caliber... the very backbone of this nation, which is her spiritual and cultural heritage....."1 Thus, it would be wrong to state that in 1947 India started to construct a modern nation from scratch. Rather, it began the process of rediscovering its

rich cultural and spiritual values that had formed the foundation of India in the past. It is on this foundation that we seek to formulate our vision of India 2020.

Development of Human resource in 2020 -

Twenty years hence, the people of India will be more numerous, better educated, healthier and more prosperous than at any other time in our long history. Having eradicated the scourge of famine that plagued the country for centuries, we still confront the challenging tasks of providing a nutritious diet to all our children, educating our teeming masses, abolishing epidemic diseases and creating employment opportunities for all our citizens.

Today India is the second most populous country in the world, with about 1.04 billion people, home to a-sixth of humanity. Although it is difficult to accurately predict population growth rates 20 years to the future, we expect this number to rise by another 300-350 million, in spite of continuous efforts to reduce fertility rates. This would raise the total population to about 1330 million by 2020.

India is in the process of a demographic transition from high fertility, high mortality and stable population to low fertility, low mortality and stable population. This transition is a global Phenomenon generated by the improved availability and access to modern health care that sharply reduced mortality rates and increased life expectancy. The Crude death rate has declined to 1/3 of its level in 1941 and the expectation of life at birth has nearly doubled during this period. Falling mortality rates have been followed by a steady decline in birth rates, but this decline has not been as steep as the fall in death rate; even after reaching the replacement fertility rates, the population will continue to grow because of large numbers of young person's entering reproductive age.

At the national level, two alternate scenarios for achieving population stabilisation have

been considered. In the optimistic scenario, which is based on achieving the demographic goals of the National Population Policy 2000, life expectancy is assumed to rise to 71 for males and 74 for females by 2020. Under the realistic scenario, life expectancy is assumed to reach 65 for males and 69 for females by 2020. Under either scenario India's population would exceed 1.3 billion in the year 2020. In both cases the sex ratio of population (females per 1000 males) would marginally increase from 932 in 2000 to 950 in 2020; reversing the historical trend of falling sex ratio is expected in the 21st Century.

Table No. 1 – Population Projection of India (in Millions)

Year	2000	2005	2010	2015	2020
Total	1010	1093	1175	1256	1331
Under 15	361	368	370	372	373
15 to 64	604	673	747	819	882
65+	45	51	58	65	76

Source: Based on P.N. Mari Bhatt, "Indian Demographic Scenario 2025", Institute of Economic Growth, New Delhi, Discussion Paper No. 27/2001.

Actually, the population under-15 years is expected to increase only marginally over the next 20 years. This means that pressure for expansion of the educational system will come only from increasing enrolment and efforts to reduce drop-out rates.

The largest growth of population will be in the 15-64 year age group, which will expand by about 46 per cent by 2020 (i.e, annually by 1.9 per cent as against the population growth of much lower, at 1.4 per cent). As shown in Table 2, it is expected to

rise from 604 million in 2000 to 883 million in 2020, i.e., from 60 to 66 per cent of the total population. This rise will accentuate the need for challenge of reducing fertility and increasing employment opportunities, so that the family size comes down and incomes rise. The elderly population is also expected to rise sharply from 45 to 76 million, (i.e., by 2.6 per cent per annum) and their share in the total population would rise from 4.5 to 5.7 per cent. As a consequence of these age structural changes, the age-dependency ratio (ratio of non-working age population to working age population) is expected to fall from 67 per cent in 2000 to 46 per cent in 2020, although the percentage of elderly people to population will increase.

Food Security:-

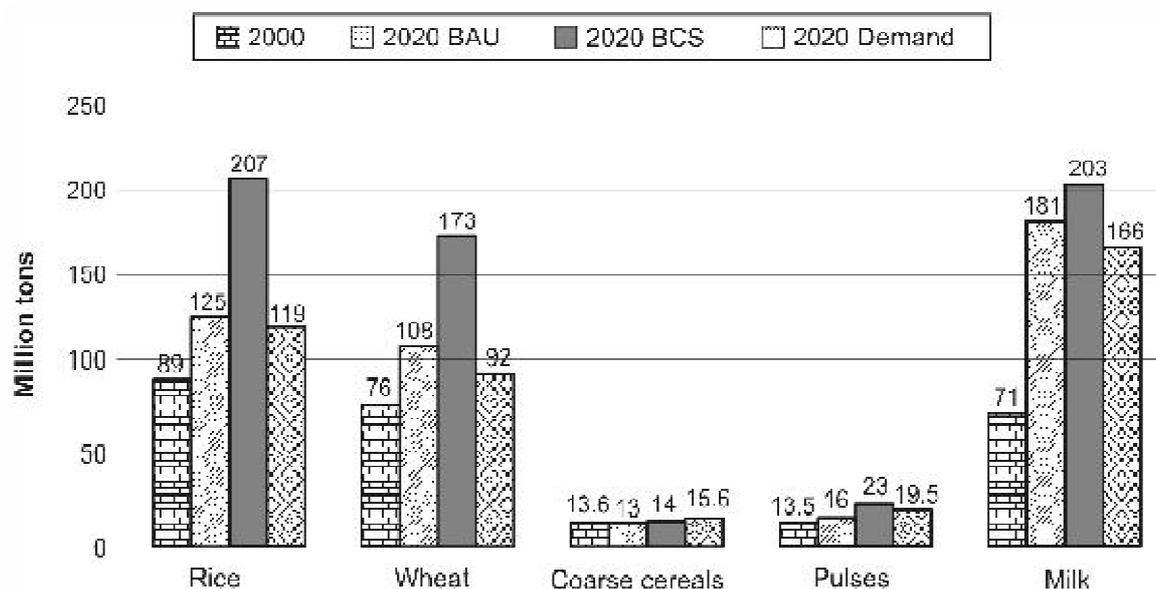
The single most important implication of India's rapid population growth during the second half of the twentieth century was the threat it posed to national food security. That threat reached dangerous proportions in the mid-1960s, leading to the launching of the Green Revolution, achievement of food self-sufficiency, and subsequently, a growing stock of surplus food grains by the mid-1970s. Happily, such a threat no longer exists for the country. Growth of food production has exceeded population growth for each of the past three decades.

The challenge of achieving food security for all our people remains a real one even today, and will continue to demand our attention in the coming decades. Food security depends on both availability of food and access to it. Long-term food security requires not only producing sufficient food to meet the market demand, but also ensuring that all citizens have the required purchasing power to obtain the food they need for a nutritious and healthy life. India has won the first battle, but the second still looms large. By best estimates, nearly half of the population still suffers from chronic under-nutrition. The most vulnerable are children, women and the elderly, especially among the lower income groups. While the number of children suffering from severe malnutrition declined significantly in the 1990s, the prevalence of mild and moderate under-nutrition, especially among those in the lower 30 per cent income group, is still high. Prevalence of micro nutrient deficiencies such as anaemia is also very high.

India is now entering the fourth stage of agricultural transformation. The Green Revolution phase spread in the north-western and southern states from the mid-1960s to the mid-1980s. From the early 1980s, it spread rapidly in the central, and to a lesser extent the eastern states. This, coupled with a further growth of productivity in the north-western and southern states, enabled India to achieve a 3.77 per cent annual growth rate in agricultural production during the 1980s. The overall growth slowed to 2.72 per cent in the 1990s, which was associated with a reduction in public investment in both agriculture and agricultural research, slower growth of fertilizer consumption and the area under high yielding varieties, and degradation of soils.

Figure 1 depicts the projected food production under two scenarios, together with estimates of food demand in 2020. Business-as-usual (BAU) assumes that growth of production continues at the same rates as during the 1990s. The Best-case scenario (BCS) assumes that production grows at the higher rates achieved during the 1980s. Even under the BAU, India will be able to meet the projected demand in all five food categories.

Figure 1: Current & Projected Food Production vs. Demand in 2020



Source: Based on R. Radhakrishnan and K.Venkata Reddy, “Vision 2020: Food Security and Nutrition”, paper prepared for Planning Commission.

India needs to sustain an agricultural growth rate of 4.0 to 4.5 per cent in order to reduce food insecurity and poverty, while increasing rural purchasing power. At this growth rate, agricultural development could more rapidly diversify into horticulture, fishery, dairying, animal husbandry and other areas. It would also spur the growth of agro-processing industries in rural areas. Such an achievement is well within reach, provided there is the requisite commitment to raising crop productivity through dissemination of advanced technologies; increasing investment in irrigation, research and training; water harvesting and improved access to credit. While food production should be able to comfortably meet the total domestic demand, there will still be sections of the population that require assistance in order to meet their nutritional requirements.

Employment:-

As population growth slows to replacement levels over the next two decades, India’s greatest challenge will be to expand the opportunities for the growing labour force, to enrich their knowledge and skills through education, raise their living standards through gainful employment and make provisions for ensuring a good life for the aged. India has met the challenge of producing sufficient food to feed everyone, but it has yet to meet the challenge of generating sufficient employment opportunities to ensure that all its people have the purchasing power to obtain the food they require. Gainful employment is one of the most essential conditions for food security and economic security.

India’s labour force has reached 375 million approximately in 2002, and it will continue to expand over the next two decades. The actual rate of that expansion will depend on several factors including population growth, growth of the working age

population, labour force participation rates, educational enrolment at higher levels and school drop-out rates. Projections based on these parameters indicate that India's labour force will expand by 7 to 8.5 million per year during the first decade of this century, and will increase by a total of about 160-170 million by 2020, i.e., 2.0 percent per annum.

The contribution of primary sector employment to the total workforce has been coming down very slowly, to 56-57 per cent in 1999-2000, and should decrease to about 51 per cent by 2006-2007. This slow rate of decline is likely to continue for at least a decade, because of the hidden under-employment in the agriculture sector, partly compensated for by the vast potential for additional job creation by crop diversification and a forestation. Increasing prosperity in agriculture will naturally lead to the growth of non-farm jobs in agri-industries, agro-business and other occupations required to meet the needs of an increasingly prosperous farming community. During the second decade of the 21st Century, increasing domestic demand for manufactured products and services, coupled with more rapid mechanization of agriculture will draw in more and more people to non-farm occupations. By 2020, total employment in agriculture may fall to less than 45 per cent, while the share of the services sector increases proportionately.

The small scale industries (SSI) sector accounts for 95 per cent of industrial units, 40 per cent of value addition, 35 per cent of exports, and 80 per cent of manufacturing employment. Registered SSI units provide nearly 18 million jobs in the country at this time. Among manufacturing sectors, the single largest employment potential is in textiles, which is slated to generate 7 million jobs over the next five years alone. More than 40 per cent of these jobs are in garment production units in the SSI sector. A healthy and rapidly expanding small sector is essential for a vibrant growth of the Indian economy as a whole. This sector serves as the field for entrepreneurship to flourish, as an entry point for new entrepreneurs who can start small and then grow, as a vehicle for extending the regional spread of industry, as a laboratory for development of innovative products and services, and as an essential support to attract large manufacturing assembling industries from overseas. Since SSIs are generally more employment intensive per unit of capital than large scale industry, they are also a source of much needed employment. Employment in the registered SSI sector has nearly tripled over the past 20 years. A repetition of this performance would generate an additional 36 million jobs over the next 20 years. A comprehensive package of venture capital, credit, liberalization of controls, technical training, marketing and management measures is needed to ensure the continuous expansion of this sector.

Education:-

Education is the foundation for a vibrant democracy in which informed citizens exercise their franchise to support the internal growth of the nation and its constructive role in the world community. It is the foundation for growth in productivity, incomes and employment opportunities and for the development, application and adaptation of science and technology to enhance the quality of life. Education is the foundation for access to the benefits of the information revolution that is opening up vistas on the whole world. Education is also the foundation for improved health care and nutrition.

India's education system has expanded exponentially over the past five decades, but its current achievements are grossly inadequate for the nation to realise its potential greatness. The net enrolment rate in primary schools is around 77 per cent and in

secondary schools it is around 60 per cent. These compare with the 99.9 per cent primary and 69 per cent secondary enrolment for the UMI reference level. The dropout rate was 40 per cent at the primary level and 55 per cent at the upper primary level in 1999-2000. These high dropout rates from both primary and secondary school, combined with low enrolment rates at the higher levels deprive tens of millions of children of their full rights as citizens. Out of approximately 200 million children in the age group 6-14 years, only 120 million are in schools and net attendance in the primary level is only 66 per cent of the enrolment.

Table 2: Education Scenarios in 2020 (in %)

	1980 Actual	2000 Estimated	2020 Business as usual	2020 Best case scenario
Primary enrolment (1 to 5)	80	89	100	100
Elementary enrolment (1 to 8)	77	79	85	100
Secondary enrolment (9 to 12)	30	58	75	100
Dropout rate (1 to 5)	54	40	20	0
Dropout rate (1to8)	73	54	35	0

Source : Garry Jacobs “ Vision 2020: Towards a Knowledge Society”, paper prepared for Planning Commission.

Achieving 100 per cent enrolment of all children in the 6 to 14 year age group is an ambitious but achievable goal for 2020. This must be coupled with efforts to increase the quality and relevance of school curriculum to equip students not only with academic knowledge but also with the values and practical knowledge needed for success in life. Table 4 depicts a business-as usual scenario for primary and secondary education in 2020, based on recent trends as well as an alternative scenario designed to radically enhance the quantity and quality of school education in the country.

Vocational Training:-

The greater that knowledge and skill, the higher will be the productivity, the better the quality, and the lower the cost of the products and services we generate. Similarly, the better the quality and lower the cost, greater will be the comparative advantage and market potential. Currently only 5 per cent of the country’s labour force in the 20-24 age category have undergone formal vocational training, compared with 28 per cent in Mexico, 60 to 80 per cent in most industrialized nations, and as much as 96 per cent in Korea.

India has over 4,200 industrial training institutes (ITI) imparting education and training in 43 engineering and 24 non-engineering trades. Of these, 1,654 are government

run ITIs, while 2,620 are private. The total seating capacity in these ITIs is 6.28 lakh. Most of this training is conducted in classroom style in the form of one to two year diploma courses. In addition, about 1.65 lakh persons undergo apprenticeship vocational training every year in state-run enterprises. If a wider definition of applied courses is taken that includes agriculture, engineering and other professional subjects, the total number receiving job related training is about 17 lakh per annum, which still represents only 14 per cent of new entrants to the workforce. The nature of vocational skills makes it impossible for vocational schools to fully address the nation's needs. The variety of skills needed by the workforce is far too great. The changes in technology and work processes are too rapid for training courses and their instructors to stay up-to date.

Health:-

The health of a nation is difficult to define in terms of a single set of measures. At best, we can assess the health of the population by taking into account indicators like infant mortality and maternal mortality rates, life expectancy and nutrition, along with the incidence of communicable and non-communicable diseases.

Communicable diseases such as malaria, kalaazar, and tuberculosis and HIV infection remain the major causes of illness in India. During the next five to ten years, existing programmes are likely to eliminate polio and leprosy and substantially reduce the prevalence of kalaazar and filariasis. However, TB, malaria and AIDS will continue to remain major public health problems. India has about 1.5 million identified cases of TB that are responsible for more than 3,00,000 deaths annually. Improved diagnostic services and treatment can reduce the prevalence and incidence of TB by 2020. About 2 million cases of malaria are reported in India each year. Restructuring the "malaria workforce" and strengthening health infrastructure can reduce the incidence of this disease by up to 50 per cent within a decade. Assessing the impact of HIV epidemic is more difficult; according to an estimate, there are about 4 million persons infected with HIV. The National Health Policy aims at achieving a plateau in the prevalence of HIV infection by 2007.

The inadequacy of the current health care system is starkly illustrated by the fact that only 35 per cent of the populations have access to essential drugs, while the UMI reference level is above 82 per cent. Infant immunization against measles and DPT for children under 12 years is only 60 per cent and 78 per cent compared to the UMI level of over 90 per cent for both diseases.

As a larger proportion of the population reaches middle class standards of living, an increasing number of people will turn to private health care providers. This development is welcome, because it will permit the public health care system to concentrate more resources on meeting the needs of the poorer sections. But at the same time, the level of public expenditure on health care needs to rise about four-fold from the current level of 0.8 per cent of GDP to reach the UMI reference level of 3.4 per cent. Rapid growth of the private health care system, however, requires the formulation of competence and quality standards to check and balance the increasing emphasis on health care as a business.

The life expectancy of the Indian population is expected to reach above 65 years in 2020,

This compares favorably with the UMI reference level of 69 years. Mortality rates for infants are expected to decline to about 20 per 1000 in 2020, which compares favorably with the UMI reference level of 22.5.

Conclusion:-

India 2020 will be bustling with energy, entrepreneurship and innovation. The countries 1.35 billion People will be better fed, dressed and housed, taller and healthier, more educated and longer living than any generation in the country's long history. Illiteracy and all major contagious diseases will have disappeared. School enrolment from age 6 to 14 will near 100 per cent and dropout rates will fall to less than one in twenty. A second productivity revolution in Indian agriculture, coupled with diversification to commercial crops, agri-business, processing industries, agro-exports and massive efforts towards a forestation and wasteland development will generate abundant farm and non-farm employment opportunities for the rural workforce. These in turn will stimulate demand for consumer goods and services, giving a fillip to the urban economy and the informal sector as well as rapid expansion of the services sector.

Computerizations of education will dramatically improve the quality of instruction and the pace of learning, so that many students will complete the first twelve years of school curriculum in as little as eight. Computerized distance education will catch on in a big way and enable tens of thousands more students to opt for affordable higher education. Computerizations in government will streamline procedures and response times to a degree unimaginable now. Perceptive observers will find that India is leapfrogging directly into a predominantly service economy.

Rising levels of education, employment and income will help stabilize India's internal security and social environment. A united and prosperous India will be far less vulnerable to external security threats.

Our future depends not on what will happen to us, but on what we decide to become, and on the will to create it.

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