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**POPULATION AND SUSTAINABLE DEVELOPMENT****Izhar Ahmad****D.S. College Aligarh , Dr B.R. Ambedkar University Agra.****ABSTRACT :**

*Sustainable development is a pattern of resource use that aim to meet human needs while preserving the environment so that these needs can be met not only in the present but also for the future generations*

*The term sustainable development was used by Burndtland Report 1987 released by United Nations sustainable development concerned for the carrying capacity of natural system with the social challenges before humanity. In early 1970s, sustainability was described an economy in equilibrium with ecological support system i.e. 'limits to growth' and for steady state economy in order to address the environmental concerns. Field of sustainable development can be conceptually broken into three constituents – environmental suitability, economic sustainability and social sustainability. United Nations world summit document refers to interdependence and mutually re-enforcing pillar of sustainable development as economic development. Along with these three pillars, the fourth pillar of sustainable development is cultural diversity (universal declaration on cultural diversity, UNESCO, 2001) which further elaborates concepts by stating that cultural diversity is as necessary for human kind as biodiversity for the nature.*

*In the present paper, above discussed four pillars of the sustainable development will not stand upright unless we forget to address demand of unlimited development which goes from vast and fast growing population growth in developing and under developed countries on the other hand large scale transformation of lifestyle which requires large amount of food, water, energy and other natural resources per capita specially developed and developing regions of the world. Thus demand for more.....will keep on going upward and there will be no hope for sustainable development.*

*Along with four pillars of sustainable development, there should be a constant/ declining demand base (K) this demand consist of two factors – one, stable/declining population growth (K1) and second, stable human resource requirement per capita (K2) which is not feasible. Thus only option left for sustainable development is K1 which need to bring down in developing and underdeveloped regions of the world otherwise sustainable development will remain a hollow slogan.*

**KEYWORDS :** *Sustainable development , pattern of resource , growth in developing.*

**INTRODUCTION**

Sustainable development is harmonious economic development for Humanity without compromising need of future generation and without disturbing Environment &ecosystem . In several world level summits and conferences above slogan was very loud but impact is insignificant , present paper will try to focus on Demographic factors which are mainly responsible for forced or blind developments world over and specially in developing worlds . such forced Developments are necessary Evils



for developing world Govtsto fulfill need and expectations of own people without caring Environmental issues . Even then majority of people are living below poverty line and devoid of basic requirements.

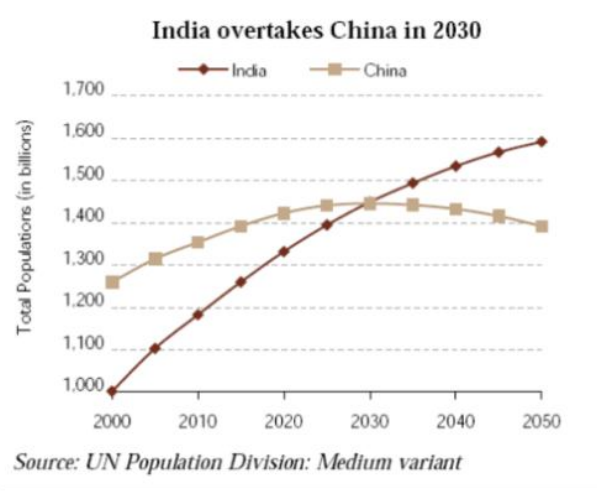
Reasons are simple carrying capacity of earth is limited, though its is some what flexible and bit expandable with help of Science &Technologies but they have their own limitations, limited resources can not be expanded to unlimited . same time Social responsibilities are on the rise all over the world , either in terms of Human number(K1) or in terms of requirements per head (K2) Which are region specific problems both need to be addresses immediately .

The challenge of achieving economic and environmental sustainability in the face of the mostExplosive population growth the world and especially in Developing countries. That makes this challenge so formidable & dreadful.Sustainability and population growth are not independent problems. They are intimately linked and related. They cannot be isolated from one another and they cannot be addressed individually.

Their solution is simultaneous and requires an understanding not of how they are unique, but of how they are linked. Same time another dimension of Population is rising standard of living in Developed and developing countries, such change require more resources per head their Ecological Foot print going bigger and bigger in contrast to Carrying capacity of this planet.

Throughout the developing world, rapid population growth is putting more pressure on farmland, pressure for in more food,Farmers with access to affordable inputs and in areas where agriculture is profitable areintensifying cropping more and more agricultural lands are coming under city sprawls and settlements.

Sustainable developments and Indiais 2<sup>nd</sup> most populous country after china having 2.41% of geographical area and almost 17% of world's population .same time its population growth of 17.64% decadal is adding another 1.81 crore people annually , with limited Geographical area of 305 million (30.5 crore hectare reported) of which 141 millon hectare is under agriculture . Union agriculture minister in November 2009 tolled to parliament that India per capita availability of agricultural land shrunk to 0.3 hectare per farmer .low size land holding are being unprofitable and formers income and inputs to fileld is on declining .



Degradation of land and Law of diminishing returns are another major issues to environment and farmer's economy .poverly and illiteracy causing very high Population growth in rural India. Indian formers are trapped into Poverty Complex , which forces them to commit suicide or they prefer to migrating in cities as unskilled labour force specially to Big metros like Mumbai , kolkotta , Delhi , Bangalore etc . such large scale migration of labors are changing Demographic profile of such cities and social tensions emerges , civil facilities of cities are disturbed , Bargaining capacity / daily wage of poor get lesser due to influx of such large no of people in cities .

Only 3 per cent of the world's water is fresh and roughly one-third of it is inaccessible. The rest is very unevenly distributed and the available supplies are increasingly contaminated with wastes and pollution from industry, agriculture and households. Over the years, increasing population, growing industrialization, expanding agriculture and rising standards of living have pushed up the demand for water.

Indicators of water stress and scarcity are generally used to reflect the overall water availability in a country or a region. When the annual per capita of renewable fresh water in a country or a region falls below 1,700 cubic metres, it is held to be situation of water stress. If the availability is below 1,000 cubic metres, the situation is labeled as that of water scarcity. At present India has 400 mhm (million hectare meters) of total water resource of which 70 mhm is lost immediately to atmosphere, 215 mhm as underground water, 115 mhm as surface runoff. Only 195.3 million hectare meter fresh water is available for country.

And when the per capita availability falls below 500 cubic metres, it is said to be a situation of absolute scarcity (Engelman and Roy, 1993). These are also the findings of a study conducted by the Tata Energy Research Institute (TERI). This concept has been propounded by Malin Falkenmark on the premise that 100 litres a day (36.5 cubic metres a year) is roughly the minimum per capita requirement for basic household needs and to maintain good health, roughly 5 to 20 times that amount is needed to satisfy the requirement of agriculture, industry and energy.

At the time of Independence, i.e., in 1947, the per capita availability of water in India was 6,008 cubic metres a year. It came down to 5,177 cubic metres a year in 1951 and to 1,820 cubic metres a year in 2001. According to midterm appraisal (MTA) of the 10th Plan, per capita availability of water is likely to fall down to 1,340 cubic metres in 2025 and 1,140 cubic metres in 2050. Some studies show even far below from mentioned availability

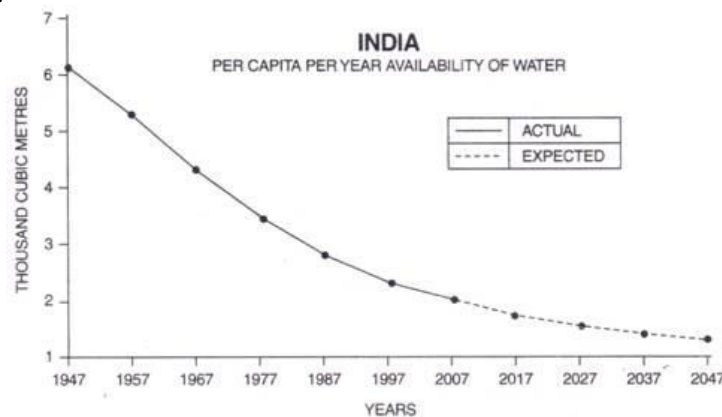


FIG. 16.6. India : Declining availability of water

A survey conducted by Tata Institute of Social Science (TISS) showed 50 lakh households in Mumbai, Delhi, Kolkata, Hyderabad, Kanpur and Madurai are water deficient. World Health Organization (WHO) specifies that minimum water requirement should be 100-200 liters per day.

Thus shrinking fresh water resources for Drinking, Agricultural and Industrial purposes are matter of deep concern in developing countries specially.

Sustainable use of limited fresh water is ultimate need of hour but same time Demographic factors like K1 & K2 are making water more scarce .

### Energy-

Eradication of poverty and economic growth of any nation depend upon the adequate and continuous supply of energy thus energy is life line of Economic development. India's growing population and its expanding economy with increase energy intensified, resulted unprecedented demand for energy sources. According to one estimate India's energy demand may intensify to 570 MT of oil equivalent to over

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1200 mtoe by 2030. Dwindling energy supply , volatile political situation in middle east and environmental concerns like Co2 emissions and global warming are posing serious threats to sustainable development idea

### CONCLUSION-

The last century has seen an unmanageable increase in population, placing a tremendous burden on natural resources. There is not enough food for the world's hungry. Also, the earth itself is worn out due to excessive farming, use of chemicals and pesticides and excessive use of ground water. Water resources are badly polluted and emission of toxic fumes from industry and vehicles has deprived us of clean air. Industrialization and a growing consumer economy have led to the creation of huge Megapolises with their problems of undisposed garbage and uncontrolled sewage. To combat these problems, world bodies like the United Nations and the World Commission on Environment and Development have been formulating ideas for environmental protection and sustainable development. Several international conferences have been held on this subject, starting with the first one in Tbilisi in 1977 to the Earth Summit in Rio de Janeiro, the Population Summit at Copenhagen, the world Summit on Sustainable Development in Johannesburg and several others. It is clearly evident that 25 years after the first conference in Tbilisi, there has not been an appreciable change in lifestyles or the level of awareness. Countries have put their own interests ahead of environmental protection and the future of coming generations. Only hope and most important factor influencing sustainability is large scale Family planning in underdeveloped and developing world specially countries like India , Pakistan , Bangladesh ,Indonesia , African countries etc where natural population growth is high . mass awakening and governmental efforts can bring down or stabilize population of such countries .

Another issue concerned with sustainability of resources lies with Consumerism in High income classes/ Societies / countries /Developed countries where high income led to high / Over consumption of energy , food and consequent High level CO2 emission and global warming . Thus both rising requirement indicators K1 & K2 should be discouraged for the sake of Environmental, Economic and Social Sustainability.