

Genome mapping

Synopsis: The genome mapping seems to have demystified some of the mysteries of life. It is an epoch-making discovery, one of the most wonderful achievements, the genome mapping saw its successful commotion in June 2000. India alone accounts for some 126 thousand varieties of animal and plant life. India is one of the 12 identified mega-centers of biodiversity. So, for about 45 thousand species of plants and 81 thousand species of animal have been identified and described, the great variety of India flora include some 15 thousand flowering plants. With is about 6 % of the global total. And the India fauna consist of 372 species of mammals, 1,228 bird species, 446 reptilians, 204 amphibians, 2,546 fishes, 40,000 insects. Many of these species are endemic and found only in particular florist and fauna regions.

In modern India there have been many great champions of science and advocates of scientific thinking who paid their wholehearted homage at the shrine of pure knowledge. But Pt. Nehru stands above them all because he strove hard throughout his life as a man, leader and the first Prime Minister of India to inculcate the scientific temper among the Indian populace. Once in an opening ceremony speaking on the spirit of Science, he said, "Science teaches us new ways of doing things. Perhaps, it improves our conditions of industrial life but the basic things that science should do is to teach us to think straight, to act straight and not to be afraid of discarding anything or of accepting anything provided there are sufficient reasons for doing so.

Partition brought unparalleled misery, pain, suffering and killings. The price of freedom paid in terms of human misery, suffering, anguish, shame, bloodshed and massive migration of people was too much and too traumatic. Even today its memory sends shivers down the spine. It was the greatest human migration that history has ever experienced. India won freedom from the colonial rule without violence, without bloodshed under the leadership of Mahatma Gandhi but then it ended in unprecedented massacre, violence and pools of blood of innocent men, women and children. Soon after the golden dawn of freedom, the skies of India were overcast with the darkest possible clouds of gloom, despair and madness.

Indian history and civilization go back to over 5000 years and as such the time span of 50 years looks too short to be country and yet it is big enough for and individual Indian citizens with a life-expectancy of 63 years for man and 67 for women. The maternal mortality rate of 307 per thousands, infant mortality

rate of 63 per thuds and that invested in our human capital all these decades since independence. We claim to have achieved food sufficiency but it is seemingly so because of 7-8 successive good monsoons it is also because the majority of the people lack the purchasing power and, therefore, there are enough food-stocks.

We have not been able to make any appreciable progress in literacy. The female literacy is below 40 per cent and it is only 20 per cent in Rajasthan. Among the scheduled tribes it is 29 per cent while in the scheduled castes it is 37 per cent. The rate of dropout at elementary level is very high. The Government's claim to achieve full literacy by the turn of the century looks too optimistic. During the Eighth Plan the government failed to utilize the whopping Rs, 252 crore of the amount earmarked for the National literacy Mission (NLM).

AIDS is a very sure, silent and painful killer. The suffering, deprivation, trauma, isolation and untold misery of an AIDS' patient can be well imagined. He dies a slow, lingering and painful death rejected and scorned by the society, relative, friends and even medical practitioners. But the gravity of the problem can certainly be eased by a mass movement in AIDS awareness. People should be educated how to avoid the dreaded disease and help the infected person. We need to be more sensitive and responsive to this global problem at various levels of a city, state, country and the world; it is a global and colossal problem and should be treated as such.

Science in itself is neither good nor bad. It is human beings who make science. Ills of science like the destructive power of nuclear weapons, the erosion of values because of spread of gross materialism, ever increasing depletion of natural resources, degradation and pollution of the environment etc. are actually the ill-effects of man using science in a way that is destructive, undesirable and unholy. It is because the scientist in man has deviated from his social commitments, social conscience. Therefore, there are some sections in the society who want an immediate halt to the growth of scientific researches and studies.

Science and morality or change and continuity are not inimical or incompatible, The evil lies in human mind which can use both science and morality for evil purposes, Science is knowledge, pure, objective and empirical engaged in making the life more easy, comfortable and less painful. There is hardly a walk of department of life which is not in the embrace of science. It has helped us in conquering diseases, hunger, famine, distances and physical and geographical barriers, it has turned the globe into an international village. The conquest of space and the moon are some of the greatest

achievements of modern science and technology. The true spirit of science lies in search and discovery of truth.

The more aware we are about the sanctity and wholeness of life in its various forms and expression, the better equipped we are for life full of peace, health, satisfaction and purposefulness. We need to rediscover our close relationship with nature, environment and other species. When forests and other species disappear, we lose much of ourselves because it boomerangs and has a rippling effect on all of us. Biodiversity and its conservation is a sure safeguard against pollution, degradation and degeneration.

The million dollar question is, would we soon have the first human clone. A Massachusetts firm called Advanced Cell Technology has claimed to have cloned embryo Michael West, the CEO of the firm said they were not trying to clone a human but to produce stem cells to cure diseases like Alzheimer's, PARKINSON'S, DIABETES, CANCER, AIDS etc. A stem cell is a master cell which can be developed into any other type of cell, made invaluable for use in producing embryonic tissue for transplantation and the treatment of a disease. But a few other researchers and scientists like Italian fertility expert Perversio Antibody have openly expressed the desire to clone a human.