On the threshold of reaching another milestone India is getting ready for a celebration of 60th Independence Day. Fifty nine years ago India became two nations. As the Father of the Nation mourned the tragic partition, millions of lives were shattered, directly or indirectly, by the partition holocaust. India had a population of 330 millions when independence was proclaimed on August 15, 1947 - Today nearly as many are living below the poverty line with perhaps an equal number of people enjoying the benefits of economic boom and market culture.

Two Indias. The India of affluence and the India of agony, the former is perceived as shining or rising while the latter as an albatross round the neck of the former—the India of hope and the India of despair. The value system nurtured by Gandhiji that influenced the architects of the Constitution and ushered in the world’s largest democracy lies buried and we silence the spirit of the Mahatma with what he disapproved most—speeches and flowers—at his memorials and portraits. The ‘faded golden age’ when Nehru’s democracy was hailed as the Athens of Asia and Indian Parliament, a model worthy of emulation, seldom get a mention in public discourse or even in lecture-halls. In less than twenty years of independence disappeared Gandhian values and British Parliamentary practices, customs and convention which operating in tandem were expected to steer Indian democracy towards the goals of equality, equity and justice.

Our educated and qualified youth, both boys and girls, are doing wonders at home and abroad as the champions of the new internet-triggered revolution. They are our pride and hope for the future. But they should not forget that more than ten times their number of boys and girls of the same age group have not seen the portals of a college in India. The Law of Acceleration operates with such effect that many of our bright youngsters may fall into the trap described by Japanese sociologist Osamu Nakano that “youth are choosing pleasure over pain, recreation over work, consumption over production and appreciation over creation.”

No point in blaming the political class or the ruling elites for all the ills of our society. The collapse of professional autonomy and integrity is as alarming as political decay. The credibility of the moulder (teacher) the healer (doctor) and the dispenser of justice (judge) is in doubt. Swami Ranganathananda lamented that “it is unfortunate that teachers in India lost faith in their own profession before our society lost faith in them.” More recently The Economist has warned that “today’s disease and medicine have developed great respect for wealth. It will be the next millennium’s task to cure it.” A Professor’s lecture(classroom) a doctor’s or lawyer’s fee place a huge burden on the national eschequer. Perhaps an unpardonable oversimplification or exaggeration (teachers, it is said, have a right to indulge in them) if one ventures to say that teachers thrive on students’ ignorance, doctors on human disease and lawyers and judges on litigation just as politicians and civil servants need poverty to survive and the media disaster to succeed! The fact that there are outstanding persons in all walks of life—scientists, teachers, doctors, administrators, lawyers, judges, and journalists—is indisputable. But Gresham’s Law operates to such an extent that the bad coins are driving out the good coins from both polity and civil society, notwithstanding the fact that we have a President and Prime Minister of unimpeachable integrity and noble vision.

Swami Vivekananda a hundred and ten years ago and Radhakrishnan fifty years later warned against man succumbing to the power of technology. CEM Joad identified the disabling weakness of modern western civilisation as the disparity between mechanical power and social wisdom. In the early years of our independence some western thinkers called India a rainbow bridge between the wisdom of the East and the knowledge of the West. Technology is vital for our progress and our status as a superpower in software is deservedly recognised. But as former Harvard President Rudenstine and Schumacher observed modern technology must be allied to ‘human values and traditional human wisdom.’ India along with China may emerge as a great power in this century. Right now it is in our hands to shape India’s future. Lord Acton wrote that ancient Rome was destroyed not by any external enemy because it had no enemy it could not conquer but by its own internal weaknesses. History does not teach too often. Two Indias must become one, not twenty.

Every ten or fifteen years since Independence India’s reputation has swung from that of a land of great opportunity to that of a country with an uncertain future. - Bimal Jalan
SCIENCE AND SPIRITUALITY - II

Sri M. NARASIMHAPPA, IRS
Commissioner of Income Tax, Visakhapatnam.

(Lecture delivered on 20-05-06
at Centre for Policy Studies
Gayatri Vidhya Parishad)

Creation of cosmos – Big Bang – Black holes:

I was 22 then one day I was looking into the RD’s Atlas and reading the Big Bang Theory. There was Black Hole – prior to any creation. There was a Bang. Billions of stars, star systems, galaxies were formed. The cosmos started expanding, even now also it is expanding. Sir Eddington calls it expanding universe. The stars that are expanding gather mass. By their very weight they would again collapse into black whole. Black Hole is a vast empty space which even light can’t escape. Again the creation starts. The Mahapralaya which has been described in the ancient religious texts. Not the small tsunamies which we experienced where a few thousands got buried in watery grave which couldn’t be prevented by any great scientific advancement.

Pothana:

I heard in Bhagavatham there is a reference to "lokambulu, Lokesulu, Lokasthulu Tegina Tudi Alokambagu Penjee Awala Evantu Ekakruti velugu". The light beyond Black Hole!!. How could Pothana a poet could talk of something similar to Black whole and also beyond. He was a devotee of God – not a scientist. Let us see some startling similarities between science and spirituality.

So in this ever expanding infinite cosmos where there are billions of galaxies, billions of star system our solar system is a small one in which our great earth is a small planet revolving around Sun, having 2/3 water, 1/3 land, with 84 lakhs of species of life out of which human beings are one and there are 5 billions of humans and I am one among them and I think that I know everything or many things in this world – not even aware of how many universes are there in the cosmos!

I said to myself preposterous! In the cosmos an individual however, great he may be is too insignificant. No need to explain my insignificance. I am like an atom in the cosmos. I am cut to right size. My search to know a little of the Truth – The ultimate Truth in an understandable rational way commenced. A strong desire arose. A prayer like desire. A quest, a search commenced.

Words of Jesus:

The seeking started. I am reminded of the great words of Jesus. Seek you shall find; knock it shall be opened. Ask it shall be given. What has been given to me, I honestly would like to place it before you. Please see whether it is useful to you. If it is I am fulfilled. I will be glad that I have been useful to somebody, if not pardon me for taking your time. I am still a seeker. I am confident that I am walking on the path. The path is actually goal less. The path itself is the goal. Then onwards a lot of things started appearing differently. It is an understanding. It may be intuition. It may be irrational to others. But it is OK for me. The search is for answering my own doubts, questions. I believe everyone has to search for himself. You have to find your own answers. First questions have to arise before answers could be found. My answers are to my questions. Your questions may be different. Consequently your answers may also be different. Sometimes our questions may be similar. Let us explore together. We can have interactive session towards the end if you feel it is useful.

Spiritualism – God:

All religions proclaim that God is One, though there are serious differences about who is that One. The Hindu god – Vishnu/Shiva/Adi Shakti, Jewish God Jehoa, Parsi Zoraster? Or Divine Father of Jesus or Allah? Or Prophet Muhammad or Param Sunya / Black hole or Buddha talked about? In the name of that One God, mankind fought several wars killing millions. Interestingly all religions proclaim that God is not only one but He is omnipresent (present in all), omnipotent (all powerful), omniscient (all knowing). Budhism, Jainism, Taoism are exceptions to this.

We are familiar with Vedic saying – Ekam Sat Vipra Bahuda Vadanti. Truth is one but knowledgeable people describe it in various ways. Everest is the one peak. But description of Everest may vary depending upon the way the mountaineer climbed – Nepal or Chinese side.

In spirituality God has been described as Truth. Truth not that of spoken truth vs. lies which we commonly refer. The truth i.e. the ultimate, that which exists forever without any change irrespective of time and place. The Truth which is beyond time and place. The Eternal, The Immortal, The Back ground, The Substratum of all.

It is said that God was one. He got bored. He wanted to be many. He created this universe.

Eternity:

We use the word frequently, what is eternity vs.time. Time is duration taken by the earth two revolve around itself. One revolution is 24 hrs.i.e one day, 365 days, 1 year. In our solar system like earth other planets are there. For eg. Jupiter takes around 5 yrs.to revolve around itself. If we imagine there is a man living in Jupiter. Our 5 yrs
Etiquette is a ticket to barbarism. - Sri Sathya Sai Baba

will be his one day. His one year will be our 365 X 5 = 1825 years. His life time say 80 yrs. will be 1,46,000 yrs. 1.46 lakh yrs = 1825 life times. His life time say 80 yrs. will be 1,46,000 yrs. 1.46 lakh yrs – 1825 life times. That means our life span is so small for a man living on Jupiter. We could see one parallel here. During rainy season there are small insects in Rayalaseema we call ‘usullu’ which take birth and grow and die near lamps, all in a few hours. For those insects we appear as devathas – unending life, because we look the same at the time of their birth and death.

Our lives are similar to those insects for the beings who may be there in other distant planets. As we have discussed earlier, there are billions of star systems – galaxies that are billions of light years away from our planet – light travelling @ speed of 186,000 miles per second. Even if man invents a vehicle which can travel at the speed of light he can hardly travel a fraction of universe alone exploring it. So it is impossible for any country or the entire world to know a fraction of cosmos. That may help us to understand the vastness of universe / cosmos – infinity and eternity of universe / cosmos.

This is the ‘Vrata purusha’ described in the Purusha sukta of our ancient Vedic texts. The Vrata purusha darsana Arjuna was bestowed upon by Srikrishna, Lord Vishnu incarnate.

To me the parallel to this in science is E=MC2 the famous equation of Albert Einstein who gave to the scientific world Theory of Relativity. Just as Adi Sankara simplified the bewildering variety of Gods and Goddesses to one single entity – Sat – The Truth – Advaita – A – Dwaitha No 2’s – the perfect logical expression. If you say one there must be other 2, 3 etc. Hence the great expression there are no 2’s. It is a koan as we see in Zen Buddhism. It is a sound of a clap of a single hand. Mind is silenced. Great void occurs. The void of womb before creation. The mahasooonya – Lord Buddha spoke about. The ‘Paripoorna Soonya’ the soonya which is pregnant all that is the all that could ever be.

Einstein reduced the diverse world to one single entity ‘energy’. Sum total of energy and matter are constant in the cosmos. Energy and matter can neither be created nor destroyed. Energy and matter are interchangeable. This is the law of conservation of energy. This is pure physics – science. This is what has been echoed in the concept.

Esavasyamidam Sarvam. God is omnipresent – all pervading.

Indugaldu Anduledu Anu Sandehambu valodu – chakri Sarvopathundu enderdu chuchina Ande kaladu.

(to be continued)

SEMINAR ON TRAFFIC MANAGEMENT

(CPS organised a Seminar on ‘Public Participation in Traffic Management’ on June 15th, 06 with Police Commissioner Sri V.S.K. Kaumudi, IPS as the Chief Guest)

Commissioner of Police V.S.K. Kaumudi has said that there should be mandatory traffic clearance for schools before they are set up.

In an interactive programme on ‘Public participation in traffic management,’ organized by the Centre for Policy studies (CPS) of Gayatri Veda Parishad (GVP) here on Thursday evening, he referred to the mushrooming educational institutions at the busy Asselmetta Junction in the city resulting in traffic congestion. If only traffic clearance was made mandatory before starting a school, such problems could be prevented, he felt.

Distinguishing lanes

When a student named Meghna Jain of Timpany School suggested distinguishing lanes on roads for different categories of vehicles like two, three and four wheelers, Mr. Kaumudi replied that it could be made possible once the road-widening programme was completed. On the issue of teenagers driving two-wheelers, he said only those above 18 years were permitted to drive vehicles with gears, With respect to the problem of parking of vehicles, which was a major concern, he said even road widening might not be a solution and it was necessary to create parking lots.

Regarding overcrowding of auto rickshaws, the Police Commissioner admitted that children were packed like sardines in autos and commented that parents were trying to save money at the risk of their child’s life. To a suggestion from Valli Ramgopal that committees to be set up to tackle the issue, he said he would not mind forming committees with the public if only it would be of help.

Mr. Kaumudi also disclosed that the Director General of Legal Metrology had spoken to him on the day suggesting fixing of meters in auto-rickshaws.

Participants felt that ‘arrogance’ and ‘ignorance’ on the part of vehicle drivers are the main causes of road accidents, most of which are preventable. Reckless driving by two wheelers, auto rickshaws and truck drivers needed to be checked. Auto-rickshaws and taxi drivers should be educated on traffic rules. Smt. Valli Ramgopal suggested involvement of school students in programmes on traffic regulation.

(Courtesy: The Hindu, 17-6-06)
GAS HYDRATES – A POTENTIAL ENERGY RESOURCE
- Prof. M.N. Sastri

The world energy demand is on a steep rise. The International Energy Agency forecasts that the world will need 60 percent more energy in 2030 than in 2002. The current oil and gas reserves, which form the bedrock of modern life will last only a few decades. A barrel of crude is expected to touch $100 very soon. Added to this is the increasing insecurity of oil supplies in the changing geopolitical scenario. Nuclear power, which has been in limbo since the Three Mile Island and Chernobyl accidents, has once again come into limelight as a viable alternative commercial energy source.

Another potential energy source that is engaging the attention of nations is Gas Hydrate Deposits. The gas hydrates are frozen cages of water molecules filled with methane, the main constituent of natural gas. The ice-like materials, also called clathrates, form at low temperatures and high pressures in deep sea. They are stable at the temperatures and pressures that occur in ocean floor sediments at a water depth greater than about 500 meters. At these pressures they are stable at temperatures above those for ice stability. Apart from methane, other hydrocarbons also form hydrates. Of the hydrates, the methane hydrates are the most abundant in the ocean floor sediments. The breakdown of a unit volume of methane hydrate at atmospheric pressure produces about 160 unit volumes of methane gas. A clump of a gas hydrate looks like a snowball. It is flammable. When set on fire it burns with a blue flame. The worldwide deposits of methane gas hydrates are estimated to range from 2.8 x 10^{15} to 8 x 10^{16} trillion cubic meters of bound methane gas, about 100 times as great as the conventional natural gas resources. The gas hydrates are concentrated where there is a rapid accumulation of organic debris washed into the bays from river mouths from which bacteria generate methane. They also exist in areas where there is a rapid accumulation of sediments, which protect detritus from oxidation. Extensive resources of gas hydrates exist in many laces around the world. A quarter of the world hydrates are located in the Alaskan North Shops of the Arctic perm a frost zone, the Gulf of Mexico and the Blake Ridge off the coast of North Carolina. If only one percent of the methane stored in these hydrates could be recovered it would more than double the current US domestic supply of natural gas. All these deposits are located in hostile environment where humans do not usually go and where humans cannot function without special equipments and protection.

Japan, US, Canada, Russia, Norway and India are among the countries that have initiated investigations on the gas hydrate resources. India has hired a special ship Joides Resolution to undertake drilling operations for the hydrate deposits. The areas where drilling will be undertaken are the Kerala-Konkan Basin on the west coast, Krishna-Godavary and the Mahanandi Basins on the east coast and the off-shore Andaman Islands. It is estimated that the resources of gas hydrates in these regions are of the order of 1.891 x 10^{13} trillion cubic meters almost 1,900 times India’s proven conventional gas resources.

Formidable obstacles have to be got over for exploiting the gas hydrate deposits as fuel. When removed from the high pressure and low temperature environment, the gas hydrate decomposes and releases the hydrocarbon contained in it. Technology is yet to be developed for the safe transport of the large amounts of the hydrates form the sea bottom deposits to the production facilities on land. Japan has taken the lead on gas hydrate exploration as the country currently depends entirely on oil and gas imports from foreign countries. Japan hopes to achieve by 2015 the commercial production of gas from the hydrate deposit in Nankai Trough off the country’s eastern coast. The US also has plans to extract methane commercially in less than two decades. Development of technology for Extraction and distribution of the gas in a cost-effective manner will meet the soaring global energy demands.

There are environmental implications also in the gas hydrate exploitation. Methane, a greenhouse gas, is ten times more effective than carbon dioxide in causing climate warming. Large-scale release of methane gas through inefficient technology could therefore lead to enhanced global warming. With reports of melting of the arctic icecaps and sea level rise, scientists also foresee a possibility of the release of methane in significant quantities from the warming Arctic sediments. This could also markedly destabilize the global climate.

Sustainable Water Resources - issues and perspectives -
with special reference to Ground Water
- Dr. P. Rajendra Prasad
Professor in Geophysics
Andhra University

Life on the planet Earth depends on the availability of the water. Though large resources of water are available on the earth, they are unevenly distributed with a highly
variable quality. More than 94% of the global water resources are found to be in oceans and 2% in the form of ice caps and glaciers while the remaining 4% is in the form of ground water. The water available in lakes, rivers and in the atmosphere does not exceed 0.05%. The bulk of the water that is contained in the oceans and in the ice caps and glaciers cannot practically be used. This has been driving the attention of every one towards ground water as the major fresh water resource.

The quest for water resources has been ever increasing with rapid increase in urbanization, agricultural production, industrialization and population growth. The phenomenal growth in these sectors has not only contributed to a significant change in the climatic conditions but also effected the very elements of hydrological cycle. This in turn, has resulted in the frequent failure of monsoons and a severe imbalance in demand and supply of this resource. The impact of these events has mounted unprecedented stress on ground water resources. In countries like India, where more than 75% of the land is covered with hard rock terrain, these problems are more complex which create a cumulative impact not only on the quantity but also on the quality of the resource. The problems of water resources are getting more and more complex because of improper or insufficient management strategies in space and time domains rather than their availability. The developments that have been taking place in this increasingly health conscious society have imparted a very high importance to quality more than quantity irrespective of whether the country or the people are poor or rich.

Since the Earth Summit in Rio in 1992, it has become obvious that there can be no sustainable development without sustainable settlements. However, the issue of urban environmental sustainability is becoming more and more critical in the recent years. The fast expanding large cities raise many problems for water resources management demanding an integrated approach. Adequate water supply and safe water drainage system are the urgent tasks while effective solutions need to be found to overcome the problems of water scarcity, deteriorating water quality, lack of effective supply systems, inappropriate handling of waste water, inadequate storm water management etc. While learning from the experiences of the West and trying to adopt their systems in the water resources sector, one has to realize that water resources management in developing countries is significantly different from the developed world. To mention a few, management of water supply and sanitation system is given least importance resulting in frequent disruptions and contamination of supply sources. In general the operation and maintenance of water supply and sanitation systems, which are the backbone of sustainable resources, are given very low priority while augmenting of new facilities are historically given highest priority. It is time that an interdisciplinary outlook, taking into account the hydrological, technical, environmental and socio-economic aspects, is inevitable in the water sector, right from planning to the execution level. In the development and management of water resources one has to build the system with special attention to the following:

1. Integrated water resources management
2. Sustainable and socio-economic and eco-environmental management
3. Urban drainage/flooding and waste water management and
4. Water quality monitoring in management

A large amount of the budget allocated for the water resources sector is being spent on the development and management of surface water resources including those of lakes and swamps on one side while the changing climatic conditions have turned many of the perennial rivers into ephemeral rivers in the recent years on the other. This in turn has forced the population in the delta regions to opt for indiscriminate exploitation of ground water resources for agricultural purposes leading to even extreme conditions like subsidence. Similarly, the improper and poorly managed drainage systems in the delta regions complimented by intensive agricultural and irrigation practices have lead to the condition of irrecoverable soil salinity.

India is one of the few developing countries which has passed through a very good phase of green revolution reaching a step beyond self-sufficiency in food production. In spite of this positive trend, the Indian farming community has not been either trained or tuned to switch from the conventional agricultural and irrigational practices so easily. It is time that the policy makers and the executive authorities concerned consult the public mainly the farmers in suggesting different crops suitable to the present and changing water resources, climate and soil characteristics. More emphasis needs to be laid on people’s participation and their acceptance initiating in all these technically and environmentally sustainable programmes.

For example, the use of ground water for agricultural purposes has experienced an exponential growth in the last three decades in the state of Andhra Pradesh which has lead to the extinction of this precious commodity in many regions. This certainly is not a welcoming observation in the water resources sector. This, however, can be averted, if more economical and environmental friendly alternate cropping and land use patterns are suggested at right time.

Except the deltaic and coastal regions and a very small
catchment area along the major river sources, the rest of the country is dominated by hard rock hydrogeology. The characteristic difference with the hard rock terrain as compared to the soft rock areas is that the ground water recharge is highly non uniform and very low in the former as compared to the later. In hard rock regions the recharge locations are confined to very small area extents controlled by structural features. As a result more than 50 per cent of the atmospheric water reaching the surface as precipitation reaches the ocean as surface run off, while very limited quantities percolate the sub-surface to join the ground water regime. This supplemented by over exploitation which results in steep decline in ground water levels. In some areas wells drilled even up to 150 meters have gone dry in recent years.

Urbanization and industrialization have mounted enormous amount of stress on urban aquifers. The indiscriminate exploitation of ground water has gone far beyond the replenishable limits. The unregulated disposal of industrial effluents and the sewerage fluids altered the ground water quality conditions and the surface and shallow sub-surface soils due to heavy pollution. The municipal supply systems are not designed to withstand the pressures of even laminar flow resulting from increasing supplies. Though the local governments have been spending enormous amount of money in augmenting alternate and additional sources, the supply and distribution systems are not geared up to handle the increasing supplies. As a result, the frequent damages that take place in the supply mechanism facilitates an easy contamination leave alone the heavy loss of this precious commodity. Lack of awareness and personal interest prompted the elite of the urban region to resort to indiscriminate punching of the ground below them, without even thinking about the posterity. Though the ground water reserves are estimated to be sufficiently high to cater to the growing needs of the population for some more time, the inefficient management strategies creates severe problems in quantity and quality. The coastal cities are highly vulnerable to sea water intrusion. Intensive agricultural practices with surplus use fertilizers and pesticides result in poor quality produce and degenerated ground water quality and soil.

It is time that proper management strategies should be in place with commitment of the policy makers and the executing authorities and voluntary participation of user groups. The major key issues that need to be addressed in this sector are:

- More stringent regulatory norms
- People’s participation from planning to execution
- Close monitoring of water quality conditions and criteria
- Improved supply systems that can efficiently handle the growth rate
- Awareness on the cost of the commodity

Water wars, not only between countries and regions but also between neighbors, perhaps are not too far off, can be averted by designing and implementing efficient management strategies. Development is no more a serious problem but management with minimum uncertainty is the need of the day.

SEDATIVE MUSIC

Dr. T.V. Sairam, IRS
Member CESTAT, Delhi.

In recent times, music therapy has gained world-wide recognition as a non-invasive complementary approach to medicine. With an ever-expanding body of research literature as its base, music can be prudently used for its therapeutic role towards making healthy individuals, and thereby a hale and hearty society.

What makes a Music, Sedative?

Sedative music, we all know, is that type of music which has a sustained melodic line at a tempo of around 60 beats/minutes (almost at the slow pace of the human heart-rate). Usually devoid of ‘analytical’ lyrics, the rhythms here are weak, vague and at times even faltering inducing soporific ambience.

Often percussions are not necessary for this type of music

For instance, many of the chants (mentioning the names of God), which do not stimulate the thinking faculty of the brain do fall under this category.

In India, there has been a long time-tested (rather, time-honoured) tradition of using a thousand names (sahastranama) of the Lord in simple melodies without complicated beats: archika, (melody constructed with only one note), gathika (melody of two notes) and samika (melody of three notes), which are not really ragas, but can be referred to as proto-ragas. (To qualify to be a raga, at least five swaras or notes are expected to be present in the raga scale).

Many of the slokas and other vedic recitations were rendered in proto-ragas, which have a direct impact on controlling (or shrinking) the mind, unlike the elaborate (fully developed) raga scales which help us in expanding the process of mental thinking, improving our analytical ability.
The Advantage of Mental Shrinkage

By shrinking the thought processes, sedative music helps us in concentration. It helps us in focusing our mind, thereby strengthening our thoughts, words and actions. Besides, this genre of music has proved analgesic effects too.

A recent Scientific Experiment

In an experiment conducted recently by Voss and his co-workers (2004) used sedative music to determine whether such music would reduce anxiety, pain sensation and pain distress in the post operative setting following open heart surgery.

A total of 61 adult, postoperative, open heart surgery patients were randomly assigned to receive 30 minutes of sedative music (n=19), scheduled rest (n=21), or usual treatment (n=21) during chair rest. During the experiment aspects such as anxiety, pain sensation and pain distress were measured with visual analog scales at chair rest initiation and at 30 minutes.

It was concluded that in the sedative music and scheduled rest groups, anxiety, pain sensation and pain distress all decreased significantly, whereas there were no significant differences in the treatment-as-usual group. After chair rest, the patients in the sedative music group were found to have 72% less anxiety, 57% less pain sensation and 69% less pain distress than the patients who underwent scheduled rest. This study also supports the previous studies that reported that sedative music is more effective than scheduled rest or usual treatment in reducing anxiety in this setting.

This study thus confirms that no pharmacologic interventions offer multiple benefits in this critically ill patient group, and thus there is an urgent need to reintroduce unverbalized chants for their soothing effects as a part of post-operative health care in all hospitals and nursing homes in this country.

Motivating and engaging patients towards a musical experience of sedative genre would stimulate the relaxation response, provide comfort, or distract them from feelings of anxiety and pain towards more pleasant sensations. Such a step may also modulate noise annoyance associated with the busy surroundings of coronary care units.

It is interesting to note that Mahatma Gandhi, the father of our Nation, had made it a point to have a daily prayer session in the evenings, when people used to congregate and sing several songs composed in sedative raga pattern.

Perhaps, this tryst with sedative music must have made him and his followers adopt and stick to non-violence as the basic theme of the freedom struggle. It is no exaggeration to say here that the right kind of music imparts the right behaviour.

In this context, it is also relevant to recall here the extent Sanskrit text Raga Chikitsa which is reported to contain specific prescriptions of ragas for alleviating various ailments.

As the body of evidence in favour of music therapy grows in leaps and bounds, it is necessary that more hospitals at least make a beginning to consider sedative music therapy as an adjunct not only to the care of post-operative heart patients, but also the other stress-prone people from all walks of life: ranging from students facing competitive examinations and the IT personnel ‘burning the mid-night CDs’. Even medical personnel such as physicians, surgeons and nursing staff badly need a ‘dose of appropriate music’ before they start their day with patients!

While prescribing therapeutic music, sufficient care has to be exercised in formulating the right kind of tonality, pitch, duration, timing and (more importantly) volume of such music, taking in consideration the clients’ constitution and his or her expectations.

(e-mail: tvsairam@gmail.com)

* * *

Human Values In The Era Of Globalisation
Technology Vs Social Wisdom - I

- A. Prasanna Kumar

(From the Rt.Hon.V.S.Srinivasa Sastri Memorial Lecture delivered at Ranade Hall, Chennai on June 24, 2006)

It is an honour to have been invited to deliver the V.S.Srinivasa Sastri memorial lecture today and I convey my gratitude to the members of the memorial trust, particularly to Sri S.V.Ramakrishnan for giving me this privilege. As a scholar, orator and master of English language Sastriar won the admiration of all those privileged to know him and hear him. His lectures on the Ramayana were masterly discourses and Mahatma Gandhi who himself wrote a beautiful book on the “Efficacy of Ramanama” evinced a keen interest in them. Rt.Hon’ble Srinivasa Sastri became famous as an orator who held the audience in thrall. No less significant was the manner in which he enriched the society in which he lived and the inspiring legacy he left behind. That is why he is still remembered with gratitude and admiration. Shri K.Iswara
Dutt, my late uncle and well-known journalist, used to tell us about Sri Satdir's oratory and the literary artistry of his writings. Sri Satdir commended Iswara Dutt's Twentieth Century as an 'organ of true education in public affairs.' Satdir's brother Sri V.S.Ramaswami Satdir was Iswara Dutt's colleague on the staff of The Hindu. To pay homage to the memory of such a multi-faceted stalwart is no ordinary task and I am fully conscious of the fact that I am unequal to it. It is with trepidation and in utmost humility that I venture to stand before the distinguished gathering to deliver the memorial lecture.

The topic I have chosen to speak on is 'Human Values in the Era of Globalisation.' There is some semantic ambiguity surrounding these terms. Still, the precious time of this august body need not be wasted over clarifications about the meaning and scope of the terms human values and globalisation. Values are the soul of every civilised society. From ancient times to the modern age values have shaped human quest for peace, progress and happiness. Ancient India, as Amartya Sen refers to in his book Argumentative Indian, was known for such values, among other things, as free debate, discussion and gender equality. Explaining the argumentative tradition Sen extols the role of Buddhist councils and of Ashoka and Akbar, 'two of the grandest emperors of India', in upholding discussion as a means of progress and pursuit of reason in governance. Public reasoning was regarded as central to participatory governance. The Nobel Laureate shows how tolerance, mutual respect and healthy public debate respectively were regarded as eternally relevant values in the Indian tradition. Athens, the cradle of Greek civilisation, held public discourses on virtue, knowledge and good society. Plato and Aristotle believed in putting 'great ideas into the service of man.'

Jawaharlal Nehru, never known to be religious minded, discovered how great religions, two from within and two from outside, strengthened the Indian tradition. If Hinduism stood for tolerance and Buddhism for compassion, Christianity and Islam that came from outside gave India such values as service and social equality respectively. Mahatma Gandhi who led the greatest non-violent revolution in history conceived and nurtured a value system that shaped the freedom struggle, influenced the philosophy underlying the Constitution and became the bedrock of independent India’s political culture. Gandhiji’s non-violence has become the creed of emancipators and political activists in different parts of the world whether it was Martin Luther King Jr four decades ago or Nelson Mandela and Desmond Tutu of our times. The Mahatma’s crusade for Harijan emancipation is today called social justice and Hindu-Muslim unity has become the larger goal of national integration. It is significant that despite clash of political interests and party rivalry, the place of these values in the Indian polity has never been questioned since India became a free nation.

Scientists and intellectuals too have accepted that values constitute the ultimate goal of every society. The science of values, it is said, includes aesthetics, art, logic ethics. Values are defined as 'those things towards which man looks for the satisfaction of his strivings.' A writer described science as ‘essentially an artistic enterprise stimulated largely by curiosity, served largely by disciplined imagination and based largely on faith in the reasonableness, order and beauty of the universe of which man is part.’ A.N.Whitehead said that science is the outcome of instructive faith. That instructive faith is shaped by human values. Science has conferred on man innumerable benefits. Man claims to have conquered even nature. Still, science has not been able to solve the riddles of human relationship. Relationship of science to society has changed. Three hundred years ago 'how' to do was the problem. The 'whys' and 'hows' of the past have become now 'what' i.e., what to do? Science in ancient times was concerned with philosophy. Now with technology it is used to acquire control over matter and resource for the benefit of man. It can help in eradicating poverty and misery. It can make life more comfortable than ever before and increase life expectancy enormously. It has also the power to destroy life and blow up planet earth in seconds. David Bromwich writes that we can give humanistic value to almost anything by teaching it historically. “Geology, economics, and mechanics are humanities when taught with their reference to successive achievements of geniuses to which these sciences owe their being. Not taught thus, literature remains grammar, art a catalogue, history a list of dates and natural science a sheet of formulas and weights and measures.” After spending millions of dollars on modernisation of the university’s infrastructure President of Harvard University Neil L. Rudenstine declared that “In the end education is a fundamentally human process. It is a matter of values and significant action not simply information or even knowledge..... how to create a humane and just society.” That is a challenge before humankind. A society that ensures equality and justice for all is a humane and just society. But there is glaring asymmetry at both global and national and local levels. The poor and less developed countries are afflicted with political, social and economic crises. As The Economist (August 14-20, 1999) observed “the challenge is that of mobilisation of global science and technology to address the crises of public health, agricultural productivity,
environmental degradation and demographic stress confronting these countries."

We are living in exciting times thanks to the third technological revolution. Information technology has ushered in a new age. Peter Drucker calls it the fourth information revolution. Knowledge is the key resource and the essence of knowledge society is mobility. Time and distance have been conquered. "The power of pace is outstripping the power of place," says an expert who explains how the law of acceleration does not relax to suit the convenience of man. Unlike the earlier industrial revolution, the computer revolution does not allow time for human and institutional adjustment. As Schlesinger says the new revolution is 'far swifter, more concentrated and more drastic in impact.' Information society is higher than agricultural and industrial societies. IT has produced a new source of wealth that is not material. It is information and knowledge applied to work to create wealth.

This is called the age of globalisation characterised by increases in flows of trade, capital and information, as well as mobility of individuals across borders. A report of the UNDP says that "global markets, global technology, global ideas and global solidarity can enrich the lives of people everywhere. The challenge is to ensure that the benefits are shared equitably and that this increasing interdependence works for people, not just for profits." Stating that globalisation is not new Amartya Sen explains how it occurred before the millennium thanks to the Chinese, Arabs, Indians and others. India, writes Sen, has been an exporter and importer of ideas. Globalisation is described as global movement of ideas, people goods and technology that different regions of the world have tended to benefit from progress and development occurring in other regions. There is no denying the fact that globalisation 'has swung open the door of opportunities.' The emergence of new role players in world affairs is a significant development. China and India are emerging as the new giants on the global scene, though both these countries have millions living in poverty and backwardness.

The several events of violence of the past and the present that occurred in this country on several counts during the last 59 years of Independent India are a cause for concern and worry to the freedom fighters and right-thinking people. The relentless struggle of the freedom fighters against the colonial rule yielded results and India became a free-nation. The sepoy mutiny of 1857, the first upsurge against colonial rule, was described by that great veteran freedom fighter, Dr. Pattabhi Seetaramayya, as "the first war of Indian Independence". Many sections of the people participated in the freedom struggle to redeem their mother land from the clutches of the British. Moderates, Extremists, revolutionaries and finally Gandhians through their varied approaches fought for one goal - a free Independent India. The concerted efforts of all those people under the leadership of Mahatma Gandhi from 1920 to 1947 brought liberty to the Indians. Gandhiji gave new impetus to the freedom movement by choosing the path of 'AHIMSA' (Non-Violence) which forced the British to leave the nation on 15th August, 1947. The first Prime Minister of India, Pandit Jawaharal Nehru jubilantly proclaimed in the Parliament on the midnight of 14th August 1947. "At the stroke of the midnight hour while the world sleeps, we awake to our freedom".

After gaining Independence and after declaring India, a Sovereign Democratic Republic on 26th January, 1950. India took long strides towards progress and allround development. All citizens of India enjoy liberty, equality, fraternity and equal justice. Even before fully enjoying the fruits of freedom the people are threatened by many obstacles / impediments in their path to progress. At present, several impediments are causing worry to the nation. The various causes that are likely to threaten the integrity, safety and security of the nation are analysed hereunder. It is time for administrators and statesmen to ponder over this matter for suggesting remedial recourse to the deteriorating value system in this great nation that is mother India.

1. Placing self above society:

Gone are those days of sacrifice and service to the nation. Now a days people are more interested in their self than the country or it's people. Even the professionals in various services are not service minded/oriented but are always looking for that extra rupee for their self aggrandisement. Health services, education and other service sectors, instead of catering to the commoner are exploiting even the poorest of the poor, which is likely to lead to a revolution, that might end up in chaos.

2. Corruption:

Corruption in government and other walks of life is the root cause of so many ills in the society. Corruption has spread it's tentacles to every nook and corner and is spreading like wild fire and becoming as incurable as cancer. This is likely to eat into the vitals of this nation and cripple us for ever.

A high development of intellectual faculties does not imply spiritual and true life. - Madame Blavatsky
3. Criminalisation of Politics:

Politics once upon a time, were associated with service to humanity and honour to the politician. But now politicians have drifted away from the political theories/values advocated by political thinkers of the classical ages. A new trend has emerged in the criminalisation of politics in India due to the non-participation of right thinking intelligentsia in Indian Politics. Cut-throats, black-marketers, smugglers, rowdy sheeters. Mafias and gangsters with their money and muscle power have become the law-makers by finding a route to the legislative bodies. This should be curtailed at any cost to cleanse the Indian political system. Otherwise, this is going to be a dangerous threat to the very existence of this great nation.

4. Regionalism:

Sectarianism and regionalism are slowly dominating the Indian Political System which is going to be a grave threat to the stability and integrity of the nation. Now a day one finds the sprouting of one regional party or the other every where in this land for the personal gains of the leaders. Because of this the spirit of one nation and one national mind is under threat. In the interests of the nation the sectarian outlook of the politicians and people must be curtailed.

5. Casteism:

India is a composition of many castes and communities. Caste is playing a pivotal role in politics in many states i.e., Bihar, Uttar Pradesh etc. Caste should have been a thing of the past as foreseen by the founding fathers of the Indian Constitution. But it is not so. It is time for the Indians to we purely Indians and nothing but Indians.

6. Religion:

Religion is so said to be an opium. Under it's spell a brother kills a brother. This is the utmost evil in the annals of out country. People should not be divided on the basics of one's religion because our birth is but an accident. This religious fanaticism must not be allowed to divide or differentiate a brother from a brother or a sister from a sister. Only then people can live in peace and prosperity and help the nation in its progress from a brother or a sister from a sister. Only then people can live in peace and prosperity and help the nation in its progress.

7. Terrorism:

Terrorism activities in Kashmir, Punjab, Maharashtra, North Eastern States etc; have taken their toll and wounded the motherland very seriously. The national security and stability is threatened. This needs to be curtailed at any cost for a harmonious and peaceful living of the people. One says that smoking is injurious to health, so also terrorism is injurious to the health of the nation. The need of the hour is a terror-free India. We need a healthy mother and not a sick-mother to look after her children.

8. Conclusion:

National spirit and national integration and adherence to ethical values can be inculcated only through education. Parents and Teachers should make the children understand the importance of patriotism and integration. Children should be taught morals and good habits. They should be brought up in such a way that they should not desire or hope to grab the things of others. The basic philosophy of human rights such as brother hood, human dignity and respect for mutual rights should be at home. Political communication should be value based. Gandhian way of life of love, non-violence, selflessness must become a way of life for every Indian.

Let us rededicate ourselves and move forward for building up a great India in this 60th Independence Year.

“Mera Bharat Mahan”

* * *

SRI AUROBINDO - I

(Aug. 15th 1872 — Dec. 5th 1950)

- Sri C. Sivasankaram

Although, “he was on the high skies only for a time, he flooded the mother land from Cape to mount with the effulgence of his light” - Dr. B. Pattabhi Sitaramayya.

August is an august month. Its majesty and venerability can be ascribed to its origin, Augustus Caesar. It is no derivation but name after the great Augustus. The month corresponds to Sravan of the Hindu almanac. The men born in this month, doubtless do inherit the leonine character of its imperial ancestor. Lion follows a Law that his attacks are not wanton.

It was Bengal of the world’s most historic nineteenth century. The century in its march saw events that made history and this history remained as history that laid path for uncommon revolutions, unheard of reforms, unusual changes of powers; the revolutionary declaration of Communist Manifesto, French revolution, ignominious end of Napoleon Bonaparte and rise of Karl Marx, the author of Das capitol and prophet of proletarian internationalism in the west, the first war of Independence, liquidation of East India company, total fall of Moghul Empire, take over of power by Queen Victoria, proclamation of Magna Carta by the Queen, founding of Indian National Congress and rise of Dr. Sunyat Sen in China in the East register a marked change and record a major phase in human multifarious affairs.

We are both spectators and actors in the great drama of existence. - Niels Bohr
Of all the provinces of India Bengal bore the brunt of British colonial yoke. It is also the Bengal that occupies a distinct niche by her supply of distinguished men of letters, men of politics, reformers, yogis and saints. There existed nine noble personalities who carved for themselves a lasting and preeminent chapter in the annals of the sub-continent. They were: Raja Rammohun Roy, Sri Ramakrishna, Bankim Chandra Chatterjee (author of Ananda Muth, Vandemataram the National Anthem) and Keshab Chandra Sen, Sri Aurobindo and Netaji Subhas Chandra Bose.

Bengal smarted under the ruthless highhanded rule of the alien. The Bengalee imbued as he was with ancestral noblesse and endowed with extraordinary emotional, intellectual and spiritual gifts showered by the Divine in heaven took upon himself the tortuous task of freeing his motherland the Infinite Bharat from British Raj, from the thralldom of stupid customs like the savage Sahagamana and rigid widowhood, and bondage of superstition that corroded what little mine of discrimination and human sympathy was there in the minds of men. His nationalist fervour, reformist zeal and zealous commitment akin to that of a crusader, combined together to evolve a broad national policy to stand like a rock against onslaughts of die hard chauvinism and childish religionism that clouded the fair face of India. The damage done by superstition, and religious intolerance to the body politic of India was logically perceived by the informed Bengalee whose soul and heart were treated to their utmost perfection by the cheering breeze and pious waters of holy Ganga Purged and heart were treated to their utmost perfection by the informed Bengalee whose soul and heart were treated to their utmost perfection by the cheering breeze and pious waters of holy Ganga Purged.

The paramount part conspicuously played by Sri Ramakrishna in the tumultuous conditions prevailing then is not negligible. The reforms aimed at by Raja Rammohun Roy and followed by his loyal followers did some good to the society and saved it from bizarre practices and oppressive beliefs. The society, however, was not yet ready to follow the path of discretion and self-knowledge.

At this crucial juncture there arose like beckon light in the midst of gathering darkness Sri Ramakrishna Paramahamsa in Dakshineswar, eleven miles from Kolkata. The disillusioned new-fangled Rammohunites realized the futility of their movement to fight down the ageold and timetested civilization and culture of India by means un-Indian and philosophy eclectic. Sri Ramakrishna a born intuitive soul as he was felt the pulse of the nation and could offer the panacea to cure the malady. His spiritual light sent its luminous rays on its accord that it could attract the attention of the reformers who in their turn enmasse rushed to Dakshineswar to kneel, to surrender to the crazy saint, shedding the fascination for introduction of mixed Indo-European form of learning, habits and attitudes. It was time for them to introspect and know that Indian culture had deeper-roots than they imagined. Here they were face to face with the epitome of the supreme content of the Divine presence embodied in Sri Ramakrishna the homespun Paramahamsa. The trances, the ecstasies, the God intoxicated dances, and sweet and direct parable counsel of him quietened the atmosphere. It provided with congenial climate to drum sense in the ears of the native. Twenty three years before his samadhi there was born on January 12th, 1863 Narendranath Datta, later Vivekananda, the thunder and lightening of Ramakrishna order. He was a reluctant disciple at fist of the saint. Ramakrishna’s strange form of instilling devotion in Bhakta appealed to the doubting Thomas Narendranath. Before the hour of his Mahasamadhi the saint transmitted and transferred his divine life’s hard earned spiritual abundance to Swami Vivekananda. Thus Vivekananda were the mantle of Sri Ramakrishna and became repository of a glorious philosophy hitherto unknown and un experienced by anybody in the universe. There sprang a mammoth literature round Ramakrishna – Vivekananda Divine combine which smashed the anglicized and christianised culture that had a heyday for a few decades. Now Bengal found her decamped soul and heaved deep sigh of relief and gained sound liesure to speculate and formulate timely measures to redeem the solemn pledge took torn for the sake of the nation as a whole – freedom of the country the means whatever and whichever, violence or nonviolence; Bengal emerged adolescent efficient to light the road towards poorna swaraj peace and plenty and unification of divisive forces and disunslisioned reformatory profligates. The fiery enterprise of Vivekananda and the shrill cry of world solidarity as a result of adoptions of Adwaita Vedanta made practicable by the touch of his master and by the robust utterance of the truth of it by himself now here, there and everywhere triumphed. This Dhira laid down his mortal coil nine years after Sri Aurobindo’s return from England and three years before Sri Aurobindo took the reins of freedom struggle in Bengal. The Swami yielded ground for Sri Aurobindo.

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The Centre for Policy Studies wants Britain to have a tax system that is simple, fair, and pro-growth. And although there have been some encouraging moves on tax policy in recent years – the corporation tax rate has gone down, the personal allowance has gone up, and savers have benefited from more generous ISAs – there is still a lot of work to be done. Find out more. Business and enterprise. Business is the wealth generator of the UK, and small and family businesses are the often neglected heart of the UK economy, with family businesses alone employing nearly four in ten of the UK’s workforce Centre members come from the disciplines of economics, social policy, geography, public policy and political science. We combine interests in social and urban theory with practical involvement in current issues of policy in the UK and across the world. Staff. Staff. Announcements. See the latest news from the Centre including mentions in the press, research findings, publications, project updates and more. Impact and engagement. Find out about the impact and engagement of our research at the School for Policy Studies. Contacts. Centre Head