

JANUARY 26th AND 30th

January is always important on our national calendar. Celebration of the Republic day on 26th is followed by solemnity of the Martyr's Day on 30th. The 55th Anniversary of the Republic was a low-key celebration this year. A feeling of relief that it passed off "peacefully" more than any jubilant spirit marked the occasion. The ritual was routine, carried out with meticulous care in the midst of tight security. Chilly winds and cold weather added to the tenseness of the atmosphere in the Capital of India, in particular. Still, the presence of the President and Prime Minister, leaders of impeccable integrity, on the occasion was a signal of reassurance that the nation is in safe hands.

Three days later came the 57th anniversary of the martyrdom of Mahatma, the day on which the nation pays homage to the Father of the Nation. Official functions at Raighat apart, prayer-meetings, two minutes' silence at 11 a.m. and "vardhanti" functions in the evening constitute the day long programmes that day, in every town and city and villages too. It was most disappointing that this year such functions and meetings were conspicuous by their non-occurrence. Even the 11 a.m. two minutes silence was not observed, perhaps because it was a Sunday. Print and electronic media too sidelined the Mahatma's death anniversary. People were obviously busy with the more important things of life!

As one part of India tries to recover from the shattering effect of "Tsunami" another part of the country gets ready for elections. India always has to overcome disasters -- natural or man-made. The former are beyond our control and the latter beyond anyone's comprehension. How else can one explain the impunity with which our politicians convert elections into murderous street-brawls and hazardous polls from which nearly half of the eligible voters shy away? The Election Commission has been working overtime to rein in the political class and inject

discipline and sanity into the entire process. "The EC alone cannot prevent the criminal elements from getting into state legislatures and Parliament", said the Chief Election Commissioner recently as some states with a notorious record of "scientific rigging" get ready for the battle of the ballot. No surprise that a national journal came out with the revelation that at least 100 members of the present Lok Sabha face criminal charges as per records.

Still, the dark cloud has a silver lining. There is not only a noble Head of State but also a visionary Prime Minister. They both evoke public confidence in the system they head, that too at a time when public respect for politicians, administrators and public institutions is at an abysmal low. The nation's demographic profile reveals that more than 70% of India's population are under 35years of age. India's younger generation is unquestionably bright and many of them are just brilliant in whatever field of activity they are engaged in. The excellent performance of Indian youth in centres of learning and research, in culture and sport and in big industry at home and abroad is too well known to need mention here. The future may be secure in the hands of the youth, if only those in charge of national governance strive to put the system back on rails. Otherwise youth expectation will lead to frustration that can cause irreperable damage to the polity and society.

The Republic of India, now 55 years old, and its billion plus people need to draw inspiration and strength from the message of the Mahatma which transcends time and space. The stirring words of Sarvepallli Radhakrishnan sum up the mission of Gandhiji. "His life and death will remain a witness to the faith that men may still overcome misery, cruelty and violence by Truth and Love.... nothing better has ever been taught or lived since the world began."

- The Editor

Truth and non-violence "I have nothing new to teach the world. are as old as the hills" **GANDHIJI**

CHINA AND INDIA

"Global Role Players"

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I am glad that the Centre for Policy Studies is actively organising seminars and discussions on issues of contemporary relevance and that the CPS is the prime-mover of intellectual activity in the city. By way of clarification, I am a China watcher, not a China specialist. I am interested in China like any one of you here. "The handshake between you and me will catch the attention of the whole world." These were the words uttered by Wen Jiabao, the Chinese Premier when he shook hands with our Prime Minister Dr Manmohan Singh, at the ASEAN Conference held recently at Vientianne. These words truly sum up the importance of Sino-Indian relations, and their place in world affairs. That is the topic on which I am going to speak today.

First a personal reason prompts me to speak on the subject. I visited China (Yunan) last year and will be visiting that country again in January next year (2005). I will be in Dali (Yunan) south east of Tibet, supposed to be 'backward' compared to China's flourishing eastern seaboard area. Dali is not even a provincial capital. First China and India seemed to have an invisible but mystic bond connecting them! Near Dali is the temple of "Avalokiteswara Buddha", an icon of divinity that we gave China. The Buddha is literally forgotten in our own land! Yunan river, Mekong, is "Mahanaga." Near home, less than 100kms away, we have Mao's own Communist Party (CPIM). Mao is going stronger and stronger here. Mao as a political icon is slowly fading away in China!

But what I saw in Dali was amazing—an airport better than in Hyderabad, a 4-lane modern lead road from airport, a sprawling modern city, blending with ancient Dali, a living heritage site, clean, well planned, new massive construction boom, economic activity all around, youth in the airport, youth in the hotels and people looked healthy. Youth seemed to be the face of China to a foreigner.

China is the fastest growing economy in the world and we are far behind. China's human rights record may be gory; but its human development achievements should make us envious of China. It is a permanent member of UNSC;India is not. China seems to be feared and respected even by a country like USA; doubtful whether India is taken as seriously! A totalitarian communist state seemed to be doing far better than a self-acclaimed democracy like ours! China has done away with dynasties; India has neo-dynasties. All these have made me intensely interested in China.

Secondly a more urgent and down-to-earth reason to know about China: we share a 2,000 km border with China which has no pretensions about claiming vast territories that belong to us like Aksai Chin and Arunachal Pradesh. China has always been eyeing Bhutan, our close ally and even Sikkim, our own state. China's military support to Pakistan especially

missile launching capability that too with nuclear warheads is a matter of concern to India. China has greater strength than India in IT hardware and is aggressively trying to overtake India in software too. It may soon sour India's IT dream and many of our IT-educated children and grandchildren may soon get unemployed unless we act fast. China's entry into WTO is also a matter of concern to India. Cheap Chinese electrical equipment, pumps and motors, toys and other goods are already flooding Indian markets. China may edge out Indian textiles, manufactured goods and engineering equipment in world market. Indian industry may soon have to close down, causing an unemployment crisis. With their large population, 1/3 of global population, China will be competing with India for every ounce of oil and every other kind of essential commodity in the world. China's occasional presence in the Bay of Bengal is an irritant to our own fishing vessels and a reminder of the impending tension.

India's perception of China has three sides to it. Is China a threat to India's soverignty and economic viability? On the other hand does China provide new market opportunities for Indian economy? Should we look at China for benchmarks of performance? Can India learn from Chinese experience? We will do well, if we understand conflicts and complementaries of India and China and strengths and weaknesses of China. A reference to the historical perspective, briefly, would be in order.

Both India and China are bronze-age civilizations, ruled by ancient dynasties. Both made vast contributions to science and knowledge. Indian kings spread Buddhism to China --Zen is 'Dhyan' and Chinese religious scholars studied at Amaravati and Nagarjuna Konda. India and China had ambassadorial relations. After the fall of the Roman empire, for 1500 years continuously, China dominated the globe as the sole 'Super Power.' India was colonized whereas China was not. Modern China passed through major political upheavals. Manchurian emperors (Chi' ing dynasty) ruled China from 1644 to 1911. China was humiliated by Japan in 1895 and was also rocked by civil war. Mao Zedong established communist China, ironically from Gate of Heavenly Peace, the main entrance to the Forbidden City the very place from which China was ruled by its imperial rulers for over 2000 years! Under Mao whose dictum was "revolution is not a relaxed dinner party" or 'leisurely painted picture' China emerged as a nation in hurry. Mao's grandiose plans and successive revamps marked the 'Great Leap Forward' and 'Cultural Revolution'. Zhou Enlai, the Chinese Premier, introduced the 'Four Modernizations' in the fields of agriculture, industry, defence, and science & technology. After Mao's demise in 1976 Deng Xiaopeng junked Mao's legacy and opened up the economy in 1978 declaring that 'reform is China's second revolution'. Chinese leaders Jiang Zemin and Hu Jintao have in the recent past stated that 'economic development must not be achieved at the expense of ideology. However, some aspects of the recent ideological shift such as'income from work, private ownership of land and private entrepreneurs can be party members-bear testimony to China's emphasis on the reform process, set in motion ten years ahead of India.

With China targeting 'Zero population growth' compared to India's growth rate of 1.9%, its population may equal India's well before 2020. China's growth rate is much higher than India's and flow of FDIs being higher than India's, the former is far ahead of India in economic progress. Right from 1950 China's productivity in agriculture was higher by 2 times than that of India. China sequenced its reforms more strategically on agriculture prior to heavy industry, contrary to the Indian approach. In the recent past China's progress in agriculture has been rapid. China has overtaken India in the generation of electricity and oil production and has outstripped India in textiles also. India, however, has the edge in cement, highways, transport, technical education, Pharmaceauticals, biotechnology and knowledge of English. During 1975-1999 life expectancy in China has improved from 63 years to 70 years while India moved from 50 to 62. On the Human Development Index China's rank is 98 as against India's 128, out of the 142 countries. India fares better than China as far as democratic institutions are concerned. There are no regular elections, people's movements and judicial activism in China.

China has responded to globalisation positively, taking full advantage of its entry into WTO. China amended 2000 laws and scrapped 830 laws within a year of its entry into WTO and brought down import tariff from 43% in 1992 to 10% in 2005. It has increased its oil and gas imports via Pakistan. Its low-cost market system is attracting the attention of advanced countries, MNCs and even Indian industries like Tatas, Bajaj, Infosys and Shanta Biotech. China has 28% of world's cloth market which poses a challenge to Indian efficiency levels and utility tariffs. In IT, biotech etc., India should move up the value chain, from IT coolies to IT designers of hardware and software as BPO boom may not last! India's reforms need to be oriented towards its own self-interest. Unless democracy is allied to discipline progress is hard to achieve, as Lee Kuan Yew of Singapore said: "I do not believe democracy leads to development. Rather, I think a country has greater need of discipline than democracy." India's greatest strength is its democracy, however flawed it is. China's lack of it may be its long-term weakness. India therefore must strengthen its institutions, eliminate corruption and poverty.

China is perceived as a nuclear threat to other countries, more so to India because of China's support to Pakistan. It is quite likely that China's support to Pakistan sponsored cross-border terrorism may boomerang. Still, India will have to budgeon its defence strike capabilities and maintain strict vigil on the border. Russia is geostrategically India's rough weather friend and new alliances may be formed in the region. Despite conflicts and persisting tension in some areas, India and China can come closer by joining hands in many areas, to be world leaders. Both are great civilizations with several common social and cultural links for centuries. They both can emerge as major role players in world affairs in the 21st century.

(Excerpts from a lecture delivered at C.P.S. on Dec. 17, 2004)

PLATE TECTONICS, EARTHQUAKES AND TSUNAMI

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The plate tectonic movements on the eastern margin of the Indian Ocean which caused the Sumatra earthquake on December 26, 2004 at 6.28 A.M. (IST) that triggered the tsunami which hit the India coast by 9.00 A.M. (IST) on that day, has added one more grave natural hazard to the long list of hazards that includes earthquakes, cyclonic storms etc. which we in India have been facing over several decades. The severity of this tsunami could be gauged from the damage it caused to 12 countries in the two continents, Asia and Africa, bordering the Indian Ocean. It caused loss of life of 1,80,000 people, destroyed property worth several crores of rupees and paralysed the means of livelihood of several lakhs of people of the coastal area, particularly the fishermen community.

The Tsunami:

The term "tsunami (plural as well as singular) in Japanese language connotes "harbour wave" (tsu = harbour, nami = wave). Tsunami are common in the Pacific Ocean, which is ringed by Circum Pacific Belt of tectonically active island arcdeep trench systems. In general, the tsunami are triggered by an earthquake in oceanic area when the severity of the earthquake is greater that 7.5 on Richter Scale (R.S.) The tsunami of December 26, was triggered in the eastern part of the Indian Ocean by an earthquake of 9.0 (R.S.) at a depth of focus of 10 km in the oceanic area. The epicentre (the point vertically above the focus on the surface) is located in the sea, southwest of northern tip of Sumatra Island of Indonesia and is southeast of Car Nicobar Island of India. The exact epicentre of this earthquake is 3.298° North Latitude and 95.779° East Longitude. Banda Aceh in Sumatra Island, Phuket Island of Thailand and Car Nicobar Island which are close to the epicentre of the earthquake were hit by 9.0 (R.S) magnitude and was followed by the severe tsunami within 30 to 45 minutes. Galle in Srilanka and also its NE Coast, Nagapatnam, Cuddalore in Tamil Nadu, Pondichery, Manginipudi beach in Machilipatnam and Ongole coast in A.P. felt a jolt of the earthquake by 6.30 A.M. with reduced severity of 3.5 (R.S) and tsunami took two and half hours to reach these coastal areas and caused the damage. In the next three to five hours, the tsunami reached the Kerala coast, Maldives, Somali and Kenya Coastal area of Africa.

The tsunami are triggered most commonly by an earthquake (7.5 and greater R.S.), very occasionally by an explosion of volcanic caldera in the ocean and very rarely by an impact of a huge meteorite from the Asteroid Zone of the Solar System, into the oceanic area of the earth. The tsunami that are triggered by an earthquake are so powerful that these could travel from one end to the other of a major ocean. For example the earthquake in 1933 that occurred in Japan in the Western Pacific with 8.5 (R.S) caused the tsunami that travelled to the Eastern Pacific and hit San Francisco coast. The earthquake in 1960 that occurred in Chile in South

America of Eastern Pacific with 8.9 (R.S) triggered a tsunami that reached the Japanese Islands on the Western Pacific. The only major tsunami worth mentioning, caused by a volcanic caldera explosion was that of Krakatau Volcano located in a small Island between Sumatra and Java of Indonesia in 1883. Again the only major earthquake that caused a tsunami with 9 mts. high waves in the Atlantic Ocean was the Lisbon earthquake on All Saints Day in 1755.

In Indian Ocean, particularly the Andaman Nicobar Islands (N&S) there are a few records of the tsunami triggered by earthquakes. On December 31, 1881, an earthquake of 7.5 R.S. occurred in Car Nicobar Island and triggered a tsunami. On June 26, 1941 an earthquake of 8.5 (R.S) occurred in Andaman and caused a tsunami that brought down the central tower of the infamous Cellar Jail where the freedom fighters were imprisoned. In 1973 and 1983 also earthquakes of 5 to 6 (R.S.) occurred in A&N Islands which were in active seismic zone, but these two have not caused the tsunami. Barren island volcano which is located 100 km east of Middle Andaman Island and rises to 300mts above MSL in Andaman Sea is the only active volcano (it exploded on 30-4-1991) within the territorial jurisdiction of India and is associated with a volcanic arc - trench system of A&N.

It is said that the earthquake by itself does not cause the damage but it is the collapse of the residential houses that causes the damage. In the case of tsunami, it is not the water of the wave that causes the damage but it is the tremendous energy that is released when a tsunami from deep water (3 to 4 km depth) moves to the shallow water and hit the coast. Sometimes the severity of an earthquake and the released energy is compared with the energy released in T.N.T. when an atomic bomb is exploded. For example the Hiroshima atomic bomb released an energy of 15,000 tons of T.N.T. The earthquake of 9.0 R.S on 26-12-2004 unleashed an energy of 32 billion tons of T.N.T. But such comparisons are not very appropriate, because an atomic bomb is an atmospheric blast and an earthquake is a subcrustal phenomenon and may cause a tsunami in oceanic water in certain cases. The mechanism of the tsunami is due to powerful earth movements in deepwater trenches, where the displacement causes a large depression of the ocean surface and the water is drawn from all sides and throughout the whole depth which may be of several km. One manifestation of this inward flow is the menacing withdrawal of the sea from the neighbouring coasts that commonly portends the onset of a dangerous tsunami. If the sea floor displacement is upwards and causes a widespread upheaval of the ocean surface, water flows outward in all directions at all depths. Whether the displacement is up or down, the momentum of the vast volume of moving water carries it far beyond its position of rest or equilibrium. The resulting waves have a large wavelength of hundreds of kilometers and travel at speeds of hundreds of kilometers an hour, but they are no more than a metre high (amplitude), and so they pass unnoticed by the ships in the open ocean or by satellites moving around the earth. The energy that is transmitted by the propagation of the tsunami is immense and is released when it enters the shallow water

and hit the coast swiftly causing terrifying destruction. The tsunami of 26-12-2004 travelled at a velocity of $750~\mathrm{km}$ per hour.

Earthquakes:

The earthquakes (some of which in oceanic areas are the immediate cause of a tsunami) have their epicenters on the globe which constitute three well defined belts. These seismic belts are 1) Circum Pacific belt (tsunami-prone belt), 2) Mediterrean and Trans Asiatic belt and 3) The Mid-Oceanic ridges. We in India are familiar with the frequent earthquakes in the Himalaya, Assam and NE region. These regions fall in the 2nd belt above. Some of the destructive earthquakes which we experienced in India during the last few decades are 1) Assam earthquake of 15-8-1950 of 8.5 RS, 2) Shillong -Meghalaya earthquake of 12-1-1985 of 8.7 RS. 3) Uttar Kasi of 20-10-1991 of 6.6 R.S., 4) Lattur - Kilari of 30-9-1993 of 6.8 R.S., 5) Chemoli earthquake of 29-3-1999 of 6.8 R.S. and 6) Bhuj-Kutchch of 26-1-2001 of 6.9 R.S. Except the Lattur - Kilari earthquake others are located in the well-defined earthquake-prone zones in India and occur due to reactivation and displacement of the crust along certain faults that developed when Indian plate moved towards north and collided with Eurasian plate some 40 million years ago.

Plate Tectonics:

Plate tectonics is a major concept in earth sciences which explains major events in geological time and is often invoked to explain the occurrence of earthquakes which in certain cases of oceanic area trigger tsunami. The A & N Island tectonic zone is located at the eastern margin of the Indian ocean bordering the Pacific Oceanic plate of active island arc - trench system, which is a collage of incomplete tectonic microplate environments. In particular the plate tectonic activity in A & N is a complex interaction of three main plates, 1) The Indian plate on the west (with that part of the Australia in SE), 2) Burma/Mynmar plate on the North and East and 3) the Pacific plate in far east. The Indian plate (with the oceanic crust and the Bengal Fan sediments) is getting subducted into the A & N trench along the 1100 km zone. Fore - arc volcanic islands developed as a result of this, for example the Barren island volcano. At the same time, the transfer fault passing through Sumatra Island passes through the Andaman Sea (east of A&N Islands) has developed a back arc extension with spreading of the oceanic crust. The immediate cause of the Sumatra earthquake of December 26, 2004 (that triggered the tsunami) is the slippage of a slab of the Indian plate (Oceanic crust and Bengal Fan sediment) into the A&N trench of the Indian Ocean.

Early Warning System of Tsunami in Indian Ocean :

Until the recent tsunami occurred, we were reluctant even to envisage that tsunami which are common in the Pacific Ocean, could hit the Indian coast in the Indian Ocean. In the relief and rehabilitation operations, the Govt. of India acted promptly to face the unexpected visitor to Indian coast and put more than 26 ships of the Indian Navy in to the relief operations, not only for the Indian coasts but also to Sri Lanka,

Maldives, Indonesia and Thailand. While it is easier to do some postmortem of the tsunami event, it is difficult to take the lesion and try to go for a prediction of an earthquake (that trigger a tsunami) due to the inherent difficulties of evaluating the potential parameters. But in the case of tsunami, because there will be a time lag between the occurence of the earthquake and the travel time of tsunami to coastal areas, for example from A&N to the east coast of India, an Early Warning System could be attempted. There is a Pacific Tsunami Warning Centre (PTWC) in Hawaii with 26 countries with members who contribute to the cost of maintenance and receive the early warning. India is not in it. Also there is no such system for the Atlantic Ocean even though the Lisbon earthquake of 1755 triggered a tsunami.

The Govt. of India took a decision to establish on its own an Early Warning System of Tsunami for the Indian Ocean and to create a Disaster Management Authority for Indian to take the relief and rehabilitation operation in a most efficient and swift way with full preparedness. If may be mentioned that the tsunami occurred on 26-12-2004, during the week long mourning of late Sri P.V. Narasimha Rao, former Prime Minister of India, who with foresight had propounded a policy of "look towards east". The present Prime Minister Dr. Manmohan Singh has taken the lead further in "look towards east policy" We have Asian Highway in the offing, an Asian Car rally that took place recently, an ASEAN membership and ASEAN Summit Meeting. Now with the announcement of the Indian Ocean Early Warning System, a new policy thrust is being given. As a policy, it is of strategic importance and it will further strnegthen the role that India will play in the ASEAN. The scientists, engineers and others concerned should take advantage of the new thrust that is being given and try to develop an Early Tsunami Warning System for the Indian Ocean, no doubt based on the existing DART (Deep Ocean Assessment and Reporting of Tsunami) System of the Pacific but with modifications that are necessary for the Indian Ocean countries.

CYBER CRIMES -SOME STRAWS IN THE WIND-II

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INFORMATION AND TECHNOLOGY ACT, 2000:

In India, today, as in the rest of the world, computers have become an integral part of the fast developing society.' For the last five years, the use of computers has become inevitable in all walks of life. The increasing employment opportunities in this field is also attracting the public attention. As computers have started peeping across the country, the crucial point that centers around the, world is cyber crimes and punishment. The Investigating agencies and judicial officers are not fully aware of this computer system and the crimes related to it. The Law enforcement agencies should understand the new methods of investigating the cyber crimes It is high

time to give proper training to the Investigating Agencies to prevent the illegal activities of the hackers. Without basic knowledge of the functioning of the computers, Internet etc., it is not possible for the Investigating Agencies to detect and prevent the cyber crimes.

To meet the challenges posed by the cyber criminals, the Indian parliament has enacted Information and Technology Act, 2000 which came in to force on 9.6.2000. It is not exaggeration to say that the IT Act is a new millennium gift given to the people of India by the Parliament. In Asia, Japan, Singapore, Malaysia and India have enacted various laws to curb the cyber crimes. Malaysia also enacted the following Acts for the same purpose:

- 1. Digital Signature Act, 1997
- 2. Computer Agreement Act, 1997
- 3. Communication and Multi-Media Act, 1998
- 4. Tele Medicines Act.

Malaysia has recognized the importance of Information and Technology earlier than India.

With the implementation of Information Technology Act, 2000 India has become one of the 12 countries in the world to put in place legal framework for facilitating all types transactions in the digital era. The Act provides a legal sanctity to computer information.

New inventions, discoveries and technologies not only brought the nations together, but also posed new challenges for the legal world. Computers, Internet and Cyberspace together known as Information Technology have also posed new problems in jurisprudence. The law providing answers to these problems or dealing with the Information Technology is often referred as the COMPUTER LAWS or INFORMATION TECHNOLOGY LAWS or CYBER LAWS.

The IT Act is enacted to sort out many problems of the cyberspace. The Indian Parliament has brought drastic changes firstly, by enacting IT Act, secondly by making suitable amendments to the Indian Penal Code, the Indian Evidence Act, the Banker's Books Evidence Act, the Reserve Bank of India Act etc. The Indian Parliament has visualised the various crimes likely to be committed by the 'white collar criminals. Computers know no boundaries. Keeping this in view, the Indian Parliament suitably inserted certain provisions in IT $_{\Delta ct}$

It is not out of place to refer sec.1 (2) and sec.75 of the IT Act. Combined reading of these sections indicate the scope of the Act. Any person who commits an offence outside India, in connection with computers, is also liable for punishment under the Act. Taking into consideration, the gravity of the offences committed by the cyber criminals, Chapter-IX is inserted to deal with punishments and adjudication. The courts can impose maximum fine amount to the tune of Rupees one crore. Chapter-IX also deals with penalty for damage to computer, computer system etc. Chapter-X deals with the establishment of THE CYBER REGULATIONS APPELLATE TRIBUNAL to exclusively deal with cyber crimes. To safeguard

the interest of the parties, the orders passed by the adjudicating Officers are appealable in this Tribunal.

Criminal liability is dealt in Chapter-XI of the Act. The other important aspect of this Act is that as per the provisions of $\sec.61$, a Civil Court has no jurisdiction to entertain any suit in respect of subject matter dealt by the adjudicating officer or the Appellate Tribunal.. As per $\sec.78$ of the Act, the police officer, not below the rank of Divisional Superintendent of Police alone, has to investigate the cyber offences.

Amendments to various Acts:

The cyber criminals have compelled the Indian parliament to amend Indian Penal Code, Indian evidence Act, Banker's Books Evidence Act and Reserve Bank of India Act. Suitable amendments are made to sections 29A, 167, 172, 173, 175, 192, 204, 463, 464, 466, 468, 469, 470, 471,474,476, 477A IPC. Where ever the word 'document' is referred in I.P.C., it includes electronic records.

In Section 3 of Indian Evidence Act, the definition of "Evidence" has been broadened to include electronic records. As per sec. 90A the court can draw presumption in respect of electronic records of five years old.

The definition of "Banker's Books" in Banker's Books Evidence Act has been defined to include not only ledgers, day books etc., but also printouts of information stored on computers and other devices.

The IT Act amended Reserve Bank of India Act and added Clause (pp) to section 58. The newly added sub-section deals with fund transfer through electronic means between the banks and other financial institutions.

The Copyright Act is also amended by adding new subsections to sec.2 and sec.2(0) by changing the definition of the word 'literary work' which includes computer program as well as computer database.

Recently the Department of Information Technology, Government of India constituted an expert committee to examine the Information Technology Act 2000 and other related laws with a view to finding out the existing shortcomings. This was thought necessary since "developments at the global level needed harmonization with Indian Information Technology Act 2000 for a secure and trusted e-society". The Committee has since submitted its report on various aspects including authentication by asymmetric cryptosystem, cyber crimes including cyber stalking, theft and sending of obscene and pornographic material, definition of 'traffic I data', use of the device of encryption for securing e-data, rights of network service providers, cyber squatting and cyber ethics. This is but indicative of the new frontiers being explored in the context of the changing dimensions of information technology.

IPRs have, it says, been regarded as 'good' for rich countries and 'poison' for poor countries. The impact of IP policies on poor people will also vary according to socioeconomic circumstances. What works in India, will not

necessarily work in Brazil or Botswana. The Report says that the 'fair use' or 'fair dealing' provisions have not met the needs of developing countries, particularly in the field of education. Stronger protection and enforcement, the Report says, will reduce access to knowledge-related products in developing countries, with potentially damaging consequences for poor people. For instance, the cost of software is a major problem in developing countries, and is "the reason for the high level or illicit copying". Copyright can also be a barrier to the further development of software which is specifically adapted to local needs and requirements". It says:

"Access to internet in developing countries is limited, although growing rapidly in most countries. But the Internet provides an unrivalled means of low cost access to knowledge and information required by developing countries, when their access to books and journals is severely restricted by lack of resources. But the application of copyright rules to the Internet is problematic. A historic 'fair use' rights may be restricted by forms of technological protection, such as encryption, which restricts access even more stringently than copyright. In the USA, recent legislation (the Digital Millennium Copyright Act) forbids the circumvention of such technological protection, even when the purpose of circumvention does not contravene copyright laws. The EU has introduced a special form of protection of databases (the' Database Directive') which rewards investment in the creation of databases, and which may restrict access to data by scientists and others, including in developing countries. The 1996 WIPO Copyright Treaty contains elements which may restrict the access of developing countries to information".

Globalization is a phenomenon which is not limited to trading activities - it also drives legal innovation, and computer law is more strongly affected than most areas of law.

(Concluded)

India that is Bharat of My Dream A Note on Areas Of Urgent Concern

Sri C.S.Rao I.E.S (Retd)

Political

Whatever may be the validity of our antiquated political philosophy in regard to the "Democracy", we need to lay down strict norms and introduce reforms in selecting candidates to represent the people in the legislature, they should be men/women of proven integrity, character, knowledge of ethos of the people, area they represent, record of selfless service etc., Recent electoral reforms did not prove adequate to meet the challenges. The Election Commission should have an independent body of eminent citizens who cannot be influenced by narrow considerations of religion, caste, creed, region etc. like the UPSC to screen the candidates and prepare a list of such persons not necessarily just before elections, but a confidential panel for each constituency and conduct informal training classes to prepare them to become future leaders. In other words, once they are selected by this body/ confirmed

"The lifestyle of the Indian elite is amazing. I have never seen such opulence even in America" - NOAM CHOMSKY

by the Election Commission, there should be no scope or little scope to point out our little finger against them. The final selection of the candidates will be left to the people themselves. It is not at all mandatory for the people to accept the list of candidates recommended by them. With all the care we have taken just before the recent elections; the gates of our legislatures were opened to the allegedly tainted ministers and even criminals to enter the portals of our legislatures. The result is what all of us are witnessing in the Parliament and legislatures with no day passing without acrimonious debates, adjournments etc. Time and public money is criminally wasted without transacting any business. It is too serious a matter to be brushed aside.

Administrative Reforms

In every branch of public activity, there is still hangover of the British imperial outmoded system at work. The common man is made to run literally from pillar to post doing many rounds bribing "Babus" at all levels to get simple things done. Complicated rules loosely framed in unintelligible language leaving much scope to harass even highly educated, not to speak of the common man, are still in vogue. Common man is least concerned with the semantics of liberalization, globalization nor even 'Swadeshi' or 'Videshi' or 'isms' but about his peaceful life, with enough purchasing power to meet his or her legitimate needs. All of us have ignored this very simple need of the hour, and are wasting all our energies, time and resources. Look at the over 200 years history of USA and how it opened its gates to all the best persons with only one aim i.e. progress of that nation and carefree life with guaranteed minimum requirements i.e., "roti, kapda, and makaan" and enough work. In short there should be little need for the common man to meet the corrupt Babus to get his/ her day-to-day needs fulfilled. Non-interference of corrupt officials i.e., least governance/simple rules and regulations is the need of the hour. It is not a 'Brahma Vidya' to evolve a simple administrative mechanism, more particularly at the level of local bodies and State Governments with which the common man is mostly concerned for his daily needs.

Judiciary

Dispensation of justice, dispute redressal mechanism should be made simple, inexpensive and quick. The vested interest i.e., legal fraternity will not allow this to happen. The laws framed are outmoded, unintelligible, and capable of several interpretations, leave gray areas, and involve protracted exercises only to feed this so-called legal fraternity. Many laws can be dispensed with and the system can be decentralized and brought within the reach of the common man. The rule of law must be made simple, equally applicable to all without regard to the status, delivery of justice to be made quick and affordable. It is possible but vested interests will not allow as we are seeing.

Education

If the child at the tender age misses values while studying, he/she cannot shape him/herself into a worthy citizen. Our

reforms must begin at the level of primary and high school education. Children are loaded with lot of unnecessary information with little knowledge and practically no wisdom being imparted. The present system of education needs thorough overhauling. Students are prepared only for jobs, which are not available. This situation is driving them to commit suicides. Education must be linked to manpower planning. Employment must be decentralized and should meet the needs of agriculture, rural development, health and literacy. Rapid urbanization, inadequate civic amenities like housing, drinking water, sanitation etc. are putting heavy burden on local civic bodies. Youth in general and educated youth in particular, if unemployed, are turning out to be criminals indulging in antisocial activities. Idle man's brain is devil's workshop. It is literally happening today.

Demographic Reforms

This country cannot become "one nation-one people" so long as there is no uniform civil code and strict check on population growth not necessarily in the name of religious freedom and secularism. When the question of our country's long term interests are concerned there is an utmost need to sacrifice sectional or group interests particularly in a country where conditions are more favourable for high birth-rate. Even China has introduced strict norms in regard to the population growth. Otherwise all our efforts to develop in all sectors of economy will be neutralized.

Economic Development

There is a need to strengthen agriculture, crop planning, storage processing and marketing etc. Rural Youth should be engaged in agriculture related activities, rural arts, crafts, and rural industries. Economic activity must be decentralized to percolate into rural areas. This can happen if there is decentralization of self-contained human settlements with provision of cheap and efficient transport. It is worth subsidizing transport services, rather than trying to provide civic amenities/ services in towns and cities, which are posing a serious threat to our environment/ ecology.

Think Tank

Today with increasing life span, the number of senior citizens is increasing at the rate of 30% p.a. and as of today, they account for one-tenth of the population. They have acquired a fund of knowledge and great experience. Quite a few of them can afford to offer "free services". They may be involved to apply their minds to find solutions for solving existing problems and suggest long-term measures. Such groups may be set up at district, state and national levels with specific guidelines for fruitful interaction. Their recommendations should be given serious consideration for implementation but should not end up in futile academic wasteful exercises.

General

The Servants of India Society, which was something like a think tank with highly dedicated, educated wise men such

as Gopalkrishna Gokhale of Fergusson College in Maharashtra should be revived by a group of senior citizens who are prepared to spare their valuable time and resources for the progress and orderly development of the country with ethical values guiding all walks of life.

INDIAN MUSIC AS COMPLEMENTARY MEDICINE-THE VIZAG SURVEY

Dr. T.V. Sairam

Chief Commissioner, Customs & Central Excise

A survey was conducted during the workshop on "Indian Music as Complementary Medicine" at Visakhapatnam recently. The workshop was attended by 69 participants, of when 13 were medical professionals, 15 psychologists, 20 music professionals and 41 non-medical people including psychologists. A questionnaire was circulated among the participants who attended the workshop with a view to gather the participants' view-points on various aspects concerning music therapy.

The very first question in the questionnaire was whether music could be therapeutic. 92% of the medicos (12 out of 13) believe that music has definite healing effect. It was interesting to note that more medicos than others had responded that music could be effective in the treatment of various diseases like hypertension (100%), depression (100%) mental retardation (70%), age related disorders (85%) and pain management (100%).

To a question whether the knowledge of music is essential for the patients, 48 out of 69 said "No". 75% of the respondents were of the view that familiar music could be more effective for therapeutic purposes than unfamiliar or foreign music. Again 75% of them were of the view that music should be tailor-made to the needs of the individuals, who have to undergo treatment.

80% of the participants believe that music should be combined with other forms of treatment such as yoga and meditation exercises while counselling sessions and psychotherapy according to 20% of the participants. Other systems of medicine such as aroma therapy, herbal medicine, Reki and ayurvedic massage etc., also go well with appropriate music.

According to many psychologists who attended the workshop music can be analgesic. Early morning and late evening hours is the right time for music therapy and music should be administered atleast twice a day for effective results.

Majority of the participants found that listening to music, while lying on the bed would be an ideal treatment position. While majority of them (70% of non-medical participants) stated that classical music could be more suitable for therapeutic sessions, only 50% of the music professionals believe so. In so far as medicos are concerned, 60% of them felt that classical music would be ideal for music therapy.

As regards the suitability of vocal music for therapeutic

purposes, 40% of the music professional and 60% of the psychologists favoured vocal music.

60% of the music professionals and 50% of all the participants favoured improvisation (Raga Alapana) as more effective than structured musical compositions.

Most of the participants favoured music therapy as an essential tool for medical intervention. According to them, a music therapist should have background of musicology first, to be followed by adequate knowledge of general medicine, neurology lastly psychology. Thus the workshop emphasized on the knowledge of musicology as an essential requirement to be qualified as a music therapist.

The workshop also had an occasion to formulate an opinion on music therapist's role.

Majority of the participants felt that a music therapist should perform the more active role of a conductor during the sessions. Others felt the need of active participation on the part of the patients as well. Accordingly, some favoured the role of a co-ordinator for music therapists.

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Bicameral Again

Sri T. Hanumantha Rao, M.A. (Retd. Lecturer, SKML College, Anakapalli)

Consequent on the passage of a resolution in the A.P. Assembly on July 8 last for the creation of a Legislative Council, the Union Cabinet gave a green signal and the way is paved for its revival in the state where it stands abolished from 1985. In this context, the Chief Minister Dr. Y.S. Rajasekhar Reddy rightly stressed the necessity of the Upper House to strengthen the democracy and rectify the pitfalls or mistakes committed by the Lower House and filter the decisions taken by the Government.

In the system of parliamentary governance, the Upper House is seen as an eminently desirable complement to the popularly elected Lower House. Unfortunately, the system of bicameralism has of late been subject to gross abuses in our country in so far as upper chambers have become a sanctuary to crest-fallen politicians who were routed at the polls and a happy hunting - ground for party bosses to find careers for their suppliant sychophants. There are various instances in which candidates defeated in the general elections have been provided with safe berths in our second chambers through the relatively easy method of indirect election or through the backdoor of nomination. These malpractices have naturally shaken the faith of the people in the utility of second chambers and there is a hue and cry against the system.

In the whole range of constitutional history, the question of unicameralism versus bicameralism has been one of the sore subjects over which opinion is seriously divided among experts. Oppponents of bicameralism suggest that it is unnecessary to have a second chamber involving delay resulting

from a complex and cumbrous procedure and its attendant expenditure. As against this, arguments for bicameral organization have commonly been based on two main points. The first is that it provides for the representation of the "classes" as against the "masses" in the legislative branch of the Government and secondly it is often considered to be an "appeal from Philip Drunk to Philip Sober", as matters which are thrashed out by two chambers carry with them all the advantages that accrue from double deliberation.

From an abstract stand point, the systems of unicameralism and bicameralism have their merits and demerits but the balance of advantage definitely lies with a bicameral body, provided of course the system is properly maintained. And all leading States in the world, whatever the character and complexion of their government - federal or unitary, monarchical or republican - maintain Second Chambers of some kind or other though their powers and functions and the methods of election vary according to different circumstances obtaining in those countries. The nature of these Second Chambers varies from a very powerful senate in the U.S. to the advisory body like the French Chamber and a nominated body of Canadian Second Chamber.

Sadly enough, the Indian Second Chambers have taken on the defective aspects of all other Upper Houses in the world without their merits and situated as they are, it is said that the game is not worth the candle. Hence, there is a great need for reform of the system of election to the Second Chambers and a revision of their functions and powers, if they are to play an effective role as revising bodies.

How to achieve this object is the question. Recourse to popular elections on the basis of adult franchise for the Upper Chamber may turn out to be disastrous as is evident from our experience with the elections to the Lower Houses where caste tyranny and money influence have their say in the matter. Under the present circumstances in India, there is need of a via media method in order to muster talent. There should be special electoral college in each delimited area for the purpose and higher educational qualifications and a higher age-limit than is laid down at present should be prescribed for membership of these bodies. Political parties as such should not contest the elections to the Upper Chamber so that there may not be a scramble for votes and men of talent may enter the field. The process is not easy but an approach on these lines would go a long way in making democracy meaningful.

It is reported that the A.P. Legislative Council would be constituted on the same old pattern. But the Government would do well to give serious thought to the reform aspect and make the Council a potent and purposeful forum and justify its revival.

HERACLITUS - I (6th TO 5th CENTURY B.C)

- Sri Challa Sivasankaram

Sanatana Dharma is a global religion. Like ether there is no place where it is not. Its pervasion and penetration is unlimited and unhindered. It sends our shoots like banyan tree from above downwards so that they strike roots deep down in the soil where humanity based itself. The eternal tree of creation referred to in the 15th chapter of Srimad Bhagavad Gita can be likened to this infinite religion with inexhaustible potential for sustaining the spirit of humanity. Dharma was interpreted by Gurudev Tagore as religion. Religion is a wide

word for Whitehead, the English philosopher. It is a comprehensive word pregnant with cardinal virtues, morals, ethics, philosophy, spirituality and the way of perfect living. Such immense Dharma, we need not wonder if it is followed in letter and spirit of the term by people of the universe belonging to all systems of religious beliefs. As this Dharma was accepted and believed to be the principal source from which world's myriad religious beliefs flowed we have sound ground to term her (the Sanatana Dharma) as the indisputable mother of Religions undermarcated by frontiers and spheres, both geographical and topographical. India has been known as the home of this eternal Dharma. By virtue of her unique status as the home of Sanatana Dharma India is privileged to get acclamation of all countries as the religious light-house that gives intermittent yet ceaseless signals to the spiritual navigator voyaging the ocean of knowledge to see and attain to the Godhead which is the purport and purpose of being born as a human

While as it has been with India Sri Aurobindo the Enlightened propounder of integral yoga had a forthright word to say about Greeks in his appraisal of their stimulating intellectual emanations, philosophical expressions, fluid precision, elastic inquisitive logic which led the Greek Mind to be looked upon as the determining power of the later European thinking. Sri Aurobindo was not only adept at the Greek language but a master litterateur of the language having been testified by the several certificates of proficiency in the language he pocketed as a student in England.

Heraclitus, next to Pythagoras, was the only pre-Socratic person of spirit that earned name and fame as a philosopher, as a mystic and as a seer to reckon with. Less popular though he was than Socrates, Plato and Aristotle, Heraclitus's contribution in the evolution and involution of human enterprise in its perpetual quest and unwearied investigation was remarkable. He was not a missing link in the mighty portals of philosophy. On the other hand he was a link of no mean order claiming to himself a paramount place among certain master-minds of his times.

Gautama Buddha of India, Confucius of China and Zoroaster of Persia were his luminous contemporaries. All the four above said philosophers were not obscurantists blowing the bagpipe of tottering tradition and suffocating conservation working only for conservation and preservation of the aged gains of the fading past banging the door against the inflow of fragrant breeze of fresh and noble thoughts pulsating with vigour of the kind that does not impede the progressive march of man's many-sided mind eager to evolve and gather flowers and fruits from all sides and quarters underscored by high humanistic element determined to go ahead with the gusto of a religious hero bent on perpetrating strife to catch out of it cream of refined wisdom to invigorate the seeker in particular and the man in general. The four remain as everlustrous stars in the spiritual firmament spanning the whole globe.

Taking a lion's view of the panorama presented by the master minds of the gigantic prominence we get thrilled and astounded by the enormity and profundity of their discoveries. East and West are twin sisters compelled to live apart by interference of geographical limits and climatic variations. Each complements the other, each enriches the other, each stand in harmony, and each is prepared to acknowledge the other as a Force not negligible. In more than one respect the sister philosophies are akin to one another. Poor historical understanding, national vanity, chauvinistic myopia distorts

the vision and erodes the spirit and destructs the context. We have to remember to understand that the socalled differences and seeming contradictions are mirage-like but not profound. From 6th to 5th Century B.C. of Heraclitus to 19th to 20th Century C.E. of John Dewey of the west and 6th to 5th

Century B.C. of Gautama Buddha to 20th Century C.E. of Dr. S. Radhakrishnan of the East there exists a telling filial harmony between East and West. The two are model sisters never at war with each other.

Homage to the memory of Shri P.V. Narasimha Rao

Centre for Policy Studies joins the Nation in paying homage to the memory of Shri P.V. Narasimha Rao, Former Prime Minister of India. The scholar statesman graciously agreed to release the CPS publication "Emancipation Before Empowerment -- a study of women's problems in Visakhapatnam" on August 6, 1999.

Shri Narasimha Rao releasing the book at the CPS function



Speaking on the occasion Shri Narasimha Rao said:

"There is an urgent need to bring a revolutionary change and create consciousness throughout the country to uplift the status of women. This requires a holistic change in our social customs, in our patterns of social behaviour and also legislation as there are "systemic flaws" in all these social institutions. Legislation alone cannot bring any sea change and it is wrong to rely heavily on legislation and gender equality would not do unless the implementation machinery was geared up to do the task. Further, confrontationist method is not at all desirable in bringing revolutionary change. People should be motivated to inculcate progressive outlook of life.

Solutions to women's problems are possible to an extent through analytical research studies with critical outlook. Data obtained through survey researches coupled with life experiences of a cross-section of society can help in formulating solutions to some of the problems. A change in the life styles of women is possible only with the cooperation of people and a committed action oriented approach by governement.

Voluntary organisations should play a pivotal role in arresting violence against women, eradicating dowry related problems, etc. Intensive studies of this kind should be made to promote awareness on the subject. This is only a beginning but not the end and more comprehensive studies are to be undertaken throughout the country to bring solutions to different kinds of problems faced by women.

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