

# BULLETIN

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# OF THE CENTRE FOR POLICY STUDIES (GAYATRI VIDYA PARISHAD)

#### THE MAKING OF FOREIGN POLICY

Foreign policy, it is said, represents a nation's total culture. It is "shaped by values, attitudes and perceptions derived from the historical experience and strategic circumstances about the nation's position in world politics." The 19th century maxim that no nation has permanent friends but every nation has permanent interests is quoted often in public discourse. Diplomacy is the handmaid of foreign policy. Aptly it has been summed up that 'foreign policy is what to do and diplomacy is how to do it."

Explaining the evolution of India's foreign policy Jawaharlal Nehru said that it was "inherent in the circumstances of India, inherent in the past thinking of India, inherent in the conditioning of the Indian mind during our struggle for freedom." The values underlying the freedom struggle exerted a deep impact on the making of foreign policy. Gandhiji provided the necessary inspiration and direction when he declared in 1920 that "an India awakened and free has a message of peace and goodwill to a groaning world." Eighteen years later at the Haripura Congress, Nehru made his famous pronouncements on the foreign policy goals of free India. The people of India desired to live in peace and friendship with all countries. India, said Nehru, would work for international cooperation and goodwill. The world was on the brink of the Second World War when a message of peace and goodwill was sent from India.

The motto was closer relations with neighbors and good relations with all and the goals of the world's largest democracy were enunciated at Columbia University in the United States in 1949 by Jawaharlal Nehru thus: "Maintenance of freedom both national and individual, the elimination of want, disease. and ignorance which afflict the greater part of the world's population." He felt that it would be 'astonishingly foolish to get into this business of cold war either on grounds of principle or on grounds of expediency. Keeping away from the rival power blocs in the post Second World War world dominated by cold war was not enough. A positive and dynamic policy aiming at elimination of poverty, injustice and violence by involving the just then liberated countries was articulated. Nonalignment was not neutrality. It was not passive noninvolvement in world affairs but active mobilization of the third world countries in a movement for establishing a new world order based on freedom, equality, and justice.

Foreign policy, cautioned a scholar, is not an exercise in

sainthood. The resentment of the west was not unexpected. US Secretary of State John Foster Dulles called the policy 'immoral'. Henry Kissinger felt that the policy was the result of psychological chaos underlying the mindset of the nonaligned leaders. Having failed to tackle their 'intractable domestic problems' the non-aligned leaders were "tempted to play a leading role in international affairs which was a fertile field of manipulation for ambitious men," wrote Kissinger. A leading American daily asked India not to be 'preachy.'

Yet, it is remarkable that Nehru's successors have scrupulously adhered to the basic tenets of India's policy. Lal Bahadur Shastri boldly exposed the hollowness of the Chinese bluff during the Indo-Pak war of 1965. Indira Gandhi skillfully prevented the inclusion of military clause in the Indo-Soviet Treaty of 1971. Morarji Desai could guote from the Mahabharata in a dialogue with his Soviet counterpart. Rajiv Gandhi's call for global disarmament and the efforts of Narasimha Rao, Gujral and Vajpayee to improve ties with the neighbours are all instances bearing testimony to the continuity of India's policy and to the commitment of the policy makers. India did not need a seat in the UN Security Council to promote peace and goodwill among nations. India was no super or great power when nations heard her with respect. As a western scholar put it Nehru did not need to go to New York to meet the world press. The world press came to Delhi to hear him.

In the globalised new international system India's influence may have declined. Non-alignment may have lost some of its relevance. But the goals proclaimed and the path chosen by India continue to be relevant. Peace and nonviolence might appear elusive in a world troubled frequently by bouts of terror and violence and dominated by a culture of acquisitiveness and ruthless competition for wealth and power. Still, it should be borne in mind that the quest for and contribution to the evolution of a peaceful international system have marked India out as a different role player in world affairs. Few countries in human history can claim to have striven for world peace and goodwill among nations for so long as India, From 3rd century B.C., when Ashoka sent emissaries of peace to distant lands.. Defeat in war and conquest by the invader could never dampen the Indian spirit. The past inspires, the present expects and the future beckons India to vigorously pursue the goals of peace, disarmament and universal brotherhood. The quest is beyond time and distance.

- The Editor

"The paths to peace are difficult but pursue them we must. They alone enable survival and fulfilment" - - Jawaharlal Nehru

#### 'PAKISTANIS KEEN ON FRIENDLY TIES'

(Report on Shri D.V. Subba Rao's lecture at CPS on 27, July 05)

Except for political and fundamental elements, the people of Pakistan are keen to live in peace with their Indian counterparts. This is the impression gained by the Bar Council of India's former chairman, D.V.Subba Rao, who was on a visit to that country recently as a BCI delegation member.

"Being freedom-loving and peace-loving, Pakistanis have a genuine desire to build bridges of understanding with Indians," he said while addressing a meeting under the auspices of the Centre for Policy Studies here on Wednesday, July 27.

Mr. Subba Rao said that he did not have the opportunity to interact with the common people, but the intellectuals he had met echoed the feeling that "if the two Germanys could unite, why cannot India and Pakistan have peaceful coexistence." Some Pakistanis traced history to cite that Hindus and Muslims had been living together in the sub-continent from the 12th century A.D. up to 1940s and asked whether it would be difficult to do that now, he said. However, Mr. Subba Rao noticed "discreet silence" among the intellectuals in respect of issues like Kashmir and cross-border terrorism. "Some of them remarked that Kashmir is not so central now for the people unlike politicians." Growth of terrorism, according to the common feeling in Pakistan, was largely attributable to the US foreign policy of dividing people. "They aver that Americans encouraged Taliban whom they had to fight later", said Subba Rao.

There is enormous goodwill for India in Pakistan – spontaneous, warm, natural and the feeling was that of waging a war against war - to fight misunderstanding, fight poverty and undo the recent past. Sharing of river waters is one such example. India and Pakistan have a shared history and the two religions have coexisted for the longest period ever. Except for political and fundamental elements, the people of Pakistan are keen to live in peace with their Indian counterparts.

The people of Pakistan understand the concept of living together. There is freedom of speech inspite of army rule. There is a genuine desire to build bridges. When at Wagah border one can only see the political divide and this is the real issue. There is remarkable spur in road and airport infrastructure and the rural urban divide is manifest as in India. Petrol is cheap and airfares cheaper. It is the political and the judicial system that have failed the nation of Pakistan. However, lawyers are at the vanguard to reestablish democracy. India has a strong independent judiciary. Pakistan's political history is exposed to military rule and army rule has subtracted democracy. Lack of robust judiciary and weakness of political parties contributed to the derailment of democracy. Lawyers are in the vanguard and thanks to their efforts there is a counterbalance to the failure of judiciary. Women occupy high positions. In a country where polygamy is practised, men outnumber women. Abortion is allowed on health grounds.

A.Prasanna Kumar, Director, Centre for Policy Studies presided and in his introductory remarks said that the focus in the twenty first century is on track three – people to people diplomacy to promote peace and development.

(Courtesy: The Hindu, July 28, 2005)

# THE MILLENNIUM ECOSYSTEM ASSESSMENT (PART-II)

- Prof. M.N. Sastri

#### Land Conversion and Degradation

Since early civilizations, the transition to complex social and political structures was often closely linked to engineering natural systems for human advantage, such as clearing forests to make way for agriculture and diverting rivers to irrigate crops. Areas of wilderness across the planets were adapted to enable settled communities to enjoy supplies of food, water, energy and materials through large-scale reclamation for agriculture, industry and living. Forests represent a major eco service. The value of forests is often measured only by the timber and fuel provided by its trees. But their eco services such as control of climate through absorption of carbon dioxide, services such as control of climate through absorption of carbon dioxide, supply of oxygen we breathe, protection of fresh water sources (watersheds), biodiversity and recreation are not taken note of even though their value to the human societies is high. Even in this age of synthetic materials, many forest products are still used in huge quantities in every society. Trees bring us wood and paper; the fashion world needs plant and animal fibres and medicines derived from nature are in ever-greater demand. In addition to acting as the "lungs of nature", forests store large quantities of carbon that would add to the greenhouse effect if released into air. Natural forest systems provide protection from a range of catastrophic events that can devastate human communities. Forest vegetation helps prevent soil erosion and reduce the likelihood of landslides. Mangroves, the forests that grow in the tidal zones of tropical regions and coral reefs- the calcareous deposits that form in tropical and subtropical waters - are the most biologically active ecosystems that provide shelter, support and food for a diversity of life. They also act as barriers against coastal storms and land erosion. It is now established that the coastal zones with mangroves were better protected from the force of the deadly tsunami that hit Indonesia, Sri Lanka, India and Thailand in December 2004. Wetlands perform a wide range of functions of great values, from acting as natural pollution filters and preventing floods by storing water during heavy rains to supporting wildlife and recreation

Since 1945, more land such as forests, savanna, wetlands and natural grassland has been converted for growing crops than in the eighteenth and nineteenth centuries combined. Nearly a quarter of the land surface of the Earth is now cultivated for food production. Tropical forests have been disappearing at a very fast rate the world over. The world's

greatest stores of biodiversity are being chewed up at an alarming rate, despite decades of talk among the world leaders and environmentalists about the need to preserve them. The Environment Ministry of Brazil said in May 2005 that 26,000 sq.km. of forest were chopped down in 12 months prior to August 2004. This figure is 6% higher than the previous 12 months. The deforestation hit a record figure in 1995, when an area of 29,000 sp.km, an area half the size of Himachal Pradesh, was cleared. Almost a fifth of the entire Amazon Forest, sqrawling over 4.1 million sq.km. and covering over more than half the country, and called the "world's lung", has now been chopped down. In Moto Gross, where half of the deforestation has taken place, trees have been replaced with soya fields for export of cash-spinning soya to China and other countries. Brazil's economy is booming, growing at an annual rate of around 5%. Last year Brazil earned about \$10 billion from exporting soya products, exceeding the income from coffee and sugar, the country's traditional exports. Brazil's business is booming but its eco-rich rain forests are disappearing!

A third of the world's mangrove forests, mainly in South Asia, have been cleared since 1980, mostly to make room for shrimp farms to cater to the palate of the Western Nations. This leads not only to the weakening of a natural barrier, making coastal communities vulnerable to nature's fury and the destruction of the habital for diverse plant and marine species. The development of the coastal regions for activities such as shrimp farming and also tourism is altering the coastline - the meeting point of land and oceans. A typical shrimp farm produces large amount of waste and displaces large number of poor people from traditional fishing and agriculture through the loss of ecologically rich land. About forty per cent of the world coral reefs, habitat for tens of thousands of animal species and protection for shorelines have been either destroyed or badly damaged.

Modern agricultural practices involving the use of highyielding hybrid food crops, large quantities of water, fertilizers and pesticides are showing adverse effects on land through salinization and water logging. An estimated area of 20 to 30 million hectares have been degraded. Increased erosion is causing a net loss of topsoil to an extent of 24 billion tonnes each year. Soil erosion rates are the highest in tropical regions such as Asia, Africa and South America.

Farming and industry have greatly increased the cycle of nitrogen through soils, watercourses and the atmosphere. The annual nitrogen input, which consists of the natural process of nitrogen fixation, fertilizer and industrial uses and fossil fuel burning, rose phenomenally from about 35 million tonnes in 1900 to about 110 million tonnes in 2000 and is projected to reach 275 million tonnes by 2050. There is already a sharp buildup of nitrogen and phosphorus fertilizers in agricultural soils, rivers and coastal waters in several parts of the world, especially in developing countries, with serious consequences for human health, fisheries and habitats such as coral reefs.

Out of the 110 million tonnes of the nutrients only 20

million tonnes are retained in the food we eat, with the rest washed away into the rivers and out into the coastal waters creating what are known as "dead zones". These zones are areas that are devoid of marine life due to severely depleted levels of oxygen. The nutrients washed out cause algal blooms in the areas. These blooms die and decompose using up the oxygen in the water to a level where most marine life including fish, crab and fish cannot survive. A typical example of a dead zone is the Gulf of Mexico, which receives every summer huge quantities of nitrogen and phosphorus from the Mississippi River that drains the Corn Belt states, particularly Iowa, Illinois, Indiana and Southern Minnesota. The zone at its peak extends over an area of 21,000 sq.km., posing an enormous threat to the ecological integrity and fish productivity of the Gulf of Mexico. The world's largest dead zone is found in the northwestern shelf of the Black Sea. Worldwide there are about 150 dead zones. Since the 1960s, the number of dead zones has doubled each decade. Most of the dead zones occur in temperate waters, concentrated off the east coast of USA and in the seas of Europe. Others have appeared off the coasts of China, Japan, Brazil, Thailand, Australia and New Zealand. Many are seasonal but some of the low oxygen. areas persist the year round. The spread of such oxygen starved dead zones in oceans is emerging as a threat to the health of the planet.

### MONSOON RAINFALL PREDICTION -PROBLEMS AND PROSPECTS

Prof. D.V. Bhaskar Rao
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Rain over India mainly occurs during the southwest (summer) monsoon period, June-September. The mean annual rainfall for entire India is 88 cm, out of which 80% is from the southwest monsoon season. India, being a vast country geographically, has large spatial variability of the rainfall. The mean Monsoon Season Rainfall (MSR) (annual) in cm over northeast India is 200 (250); over west coast of India 250 (250), where as northwest India is 30 (30) and southeast India is 30 (75). The entire country is divided into five zones and 28 subdivisions based on homogeneity of rainfall distribution. The temporal distribution of MSR shows onset during June. maximum rainfall during July followed by August and retreat during September. The monsoon has its onset over southern tip of India and north eastern parts of India around 1 June covering the entire country by end of June. The onset of the monsoon is characterised by sudden spurt in rainfall associated with increasing humidity and reduction of temperature. The first spell of rain or the onset of the monsoon advances from south to north and from northeast to westwards and this phenomenon was recorded since ancient times as evident from "Meghasandesa" of Kalidas. The rains during the onset phase and the main rains during July are very important for agricultural operations. The monsoon starts its retreat from northern parts of India from 1 September onwards slowly southwards, generally disappearing by the month end.

Agriculture in India is purely dependent on rainfall and so MSR has great impact on Indian economy. The growth and performance of Indian economy is assessed on the behavior of the MSR. Agricultural operations are strongly dependent on availability of water either through direct rainfall or irrigation sources. It is to be noted that rainfall is also the contributor for irrigation water. Due to this reason, prediction of the MSR is important for the administrators to plan and for the farmers to plan the agricultural operations. This indicates the desirability of the prediction of the spatial and temporal distribution of monsoon rainfall. The administrators and planners would require a prior indication of the seasonal behavior or what could be the rainfall over the entire country (assuming normal spatial distribution) two to three months ahead so that the food production during the next year could be estimated and necessary planning can be made. The farmer needs prediction of the occurrence of the rainfall about 7 to 10 days ahead to plan his agricultural operations.

The problems of rainfall prediction are manifold. The spatial and temporal scales of the rainfall prediction are interdependent. This means that rainfall over a small area such as few hundred square kilometers can be predicted only for a day (rainfall occurrence during the past 24 hours) or so whereas rainfall representative for few thousands of kilometers can be predicted for 7-10 day in advance. It is also to be noted here that the prediction value decreases sharply after 2-3 days but rainfall representative of large area and longer duration could be projected. An important problem in the prediction of the rainfall is that rainfall is the ultimate product resulting from complex atmospheric processes and is not dependent on any one or few of the measurable atmospheric parameters such as wind, temperature, pressure and humidity. One should imagine the global atmosphere as a single unit forced by the energy from Sun and interacting with the earth's surface, which itself has infinite different surface types. Within the limitations of the complexities, the atmospheric scientists try to observe the periodicities in nature and examine their relationship with the prediction and rainfall.

First attempts to predict the MST, were made in 1924, based on Eurasian snow cover and the differences in the pressure variation at Darwin and Tahiti in southern hemisphere. India Meteorological Department (IMD) is the official agency for the forecasting of MSR and statistical regression methods were being revised to include/delete variables. The finding of EL Nino phenomenon, warming of the equatorial eastern pacific ocean temperatures, and its significant negative relation with the Indian MSR was established. IMD developed a 16 parameter model in 1991 which was used to issue MSR prediction from 1991 to 2003. This method is to obtain the regression coefficients associated with the different predictors based on the past available data. It was a pure coincidence that IMD issued normal MSR for 14 consecutive years till 2001, which were successful. The failure of the IMD model to predict the severe drought 2002 monsoon season raised many questions about the capabilities of the statistical regression model. A careful analysis of the statistical

method shows its disadvantages as: (i) A single rainfall value representative of entire India is an average over large region and is bound to be near the normal values irrespective as it smoothens the spatial variability. (ii) A serious problem with the regression model is that it may not be able to predict the extremities such as excess and deficit of monsoon rainfall but tends to indicate small variation of normal values. This may be due to the use of as many as 16 parameters which may have unidentifiable interdependency. For the user community, this type of prediction is of little use. It is well known that there is a large spatial variability of MSR and also that rain spells may concentrate over certain regions while dry spells prevail over other regions as evident from simultaneous occurrence of floods and droughts over the Indian region.

After the failure of MSR prediction in 2002, IMD started to revise their models as 8 and 10 parameter models to issue two forecasts, one in April for the entire monsoon season based on 8 parameter model and another in June for the months of July, August and September with the 10 parameter model. The 8 and 10 parameter models were obtained through re-examination of the relation between the predictors and the MSR and deletion of certain old parameters and inclusion of two new parameters. These predictions are issued as probabilistic estimate not only for entire India but also for different subdivisions. Though IMD uses the statistical regression models for the seasonal prediction of rainfall, the limitations of the methodology restrict its applications.

An alternative approach is to use the numerical models for weather prediction. The numerical models use mathematical equations that define the changes in the atmosphere incorporating the dynamical and physical processes. These models can be integrated in time to give quantitative prediction. The accuracy of the model prediction is restricted to few days due to the errors in the observations at the initial time step and the imposed approximations on the atmospheric processes. Models resolving the atmosphere at 50-100 km resolution have become possible due to explosive technological developments in computers. The description of the initial state of the model atmosphere also improved due to more observations from remote land and ocean regions through remote sensing methods. These models give quantitative rainfall up to 7-10 days which are extremely useful for farmers. Some downscaling techniques help the model predicted rainfall for point estimation. Some preliminary experiments of integrating these models for few months have shown promise to give reasonable estimates for a season.

Though the basic mathematical equations for the atmospheric flow are same, many models are being used, which differ in numerical methods of solution and different hypotheses for convection, radiation, planetary boundary layer and soil processes. As can be expected, each model has its capability to predict different atmospheric phenomena and rainfall occurrence is associated with a variety of phenomena such as thunderstorms, low pressure systems, vortices and planetary waves. Keeping in view the models' variability in their performance skills, Prof. T.N. Krishnamurti, of Florida.

State University, USA, developed a new concept called superensemble approach, which can be applied for both the weather and climate prediction. The multimodel superensemble method consists of two components—the training phase, and the forecast phase. During the training period, the model forecasts and the observed (analysis) fields are utilized to derive model performance statistics, which are then passed on to the forecast phase where multimodel forecasts are weighted as per their past performance to obtain superensemble forecasts. This approach seems to identify the good and bad skills of the individual models and to correct them for their best contribution to the prediction.

The INDO-US Science and Technology Forum recently organised a high level meeting at NCAR, USA to discuss the problems of weather and climate prediction. Dr. V.S. Ramamurthy, Secretary, Department of Science and Technology, Govt. of India, and leader of the Indian delegation emphasised the need for a better quantitative prediction of the medium range and seasonal prediction of the monsoon rainfall for the Indian region. The scientific discussions concluded that numerical models are to be used for MSR prediction and the INDO-US scientists can work together to use the NCAR WRF model for monsoon seasonal prediction. The atmospheric modeling group at Andhra University are actively collaborating with Prof. T.N.Krishnamurti group at FSU to use the superensemble approach for monsoon prediction. The author feels that extensive use of dynamical weather prediction models may lead to better understanding of the Indian southwest monsoon and its prediction.

(Prof. Bhaskar Rao, the author, attended the high level meeting at NCAR, USA in July 05)

# THE INDISPENSABLE NEED FOR INTELLECTUAL PROPERTY RIGHTS (IPR) AWARENESS

Prof. R. Venkata Rao and Dr. D.S. Prakasa Rao A.U. Law College.

Dr. B.R. Ambedkar College of Law, Andhra University, Visakhapatnam organized a one-day National Seminar on "IPR Laws and Policy-Emerging Trends and Challenges" which was sponsored by Ministry of HRD, Government of India, New Delhi on 16th July, 2005. A number of distinguished academicians, jurists, lawyers, law officers from various parts of the country and also law students participated in the seminar.

Prof. L. Venugopal Reddy, Vice-Chancellor, Andhra University, Visakhapatnam inaugurated the seminar. Prof. K.C. Reddy, Chairman, A.P. State Council of Higher Education, Hyderabad and a distinguished economist delivered the key note address, Prof. R. Venkata Rao, Principal, Dr. B.R. Ambedkar College of Law, Andhra University, Visakhapatnam and also the President of the Seminar presided over the inaugural function. Dr. D.S. Prakasa Rao, Associate Professor acted as Director of the seminar.

Prof. R. Venksta Rao in his presidential remarks touched on the economic reforms in post globalization era and stressed the need for human face to the reforms. The protection of IPR in India continues to be gathing strength. The issue of IRIPS is of great concern for developing countries like India. In this regard, there is need to train the students of law, eclence, technology, engineering and pharmacy so that they can be well equipped with the latest developments in IPR, he optised. In China, there are more than 5,000 JPR training institutes, he informed the gathering. He stressed the need for introducing IPR as a subject in under graduate course as in the case of environmental studies which was introduced in all under graduate courses as a compulsory subject on the direction of the Supreme Court of India.

In this regard, he complimented Government of India for taking the initiative to provide funds to spread/create awareness on IPR among the stake holders. Even though Mexican economy has collapsed in globalization era with free market economy, India could withstand with economic reforms, mainly because of its strong agriculture based rural economy. Prof. Rao emphasized the need for protecting farm sector from the subsidized agricultural products of developed countries particularly America and European Economic Union Countries.

Prof. L. Venugopal Reddy elaborately discussed the problems faced by Indian free market economy. He stressed the need for protection of traditional knowledge. Free economy, economic development, liberalized policies of the government should safeguard the interests of Indian Agriculture and agro based industries as more than 85% of Indians still depend upon agriculture and agro-based industries he opined. Prof. Venugopal Reddy also referred to the controversies of patenting Basmati Rice, Turmeric and Neem by the foreigners which had an adverse impact on our foreign trade. In this regard, concerted efforts were required to protect traditional knowledge. Being a member of W.T.O., India should protect its interests in bio diversity, geographical interest and develop biotechnology for food security and health care. Bio Piracy is new type of terrorism from which we should protect ourselves. This can be done through effective IPR Protection, he observed. We can also protect the traditional dance forms like Bharat Natyam and Kuchipudi through IPR, he suggested. In India, there is lot of discussion about IPR but nobody is serious in learning what is IPR and how it can be protected, he lamented. IPR is should be useful to common man and be helpful in eradicating poverty and should not promote digital divide, he said.

In his key note address, Prof. K.C. Reddy, said that the APSCHE would also consider allowing the universities and colleges to introduce certain lessons on IPR at graduation level. He stressed the need for development of intellectual capital which can be possible only through IPR. Stating that IPR had come to stay, he said that a nationwide debate was required on the challenges and opportunities posed under the new IPR regime.

He discussed at length the impact of IPR on Indian Agriculture and Health, citing the instances of how after Doha Declaration, the prices of drugs, particularly life saving drugs which shot up by 12 to 15% were brought under control. Prof. Reddy observed that reduction in public investment in agriculture could not be compensated with private investments. Dependency of people on agriculture was very high in India compared to 24 percent in China and less that 105 in the U.S. Policy makers have to evolve new guidelines for ensuring accelerated and sustainable development of this sector, he felt. In this regard, he discussed the objectives of W.T.O. along with Doha Declaration. He said that compulsory licensing is the safeguard for the excesses supposed to be creeping in through TRIPS in free market economy. He also discussed the need for strengthening agriculture in the backdrop of IPR compatible legislations. He focused on the nuances between product patenting and process patenting and their impact on Indian economy particularly after 1<sup>st</sup> January, 2005, Patenting local talent, as Vice-Chancellor Venugopal Reddy suggested, is the need of the hour, he concluded.

In the current phase, it is necessary to protect the interests of different right holders and at the same time, societal interest to acquire and use the knowledge also needs to be ensured. IPR are private rights in respect of which the international community has taken steps to achieve uniformity as to nature of rights, combined enforceability and sanctions for breaches thereof. Thus Intellectual Property is a private creation craving for public protection. However the legal regulation of technical innovation in free market economies has always confirmed principles drawn from four artificially disarticulated legal subcultures 1) Intellectual Property Laws 2) Trade Secret Laws 3) Anti Trust Laws and 4) Unfair Competition Laws. An evaluation of intellectual property rights must recognize the interplay of these disciplines in different economic environments in order to represent accurately the balance between legal incentives to create and free competition. The different policies at stake in each of these often competing legal subcultures (conflicting interests of sovereign states at different stages of development) have made it essential for the stake holders to better their prospects only through negotiations. In this backdrop one should understand the IPR laws.

## APMC and the New Legislation

- Shri Vivek Cariappa Member, High Power Committee on Organic Farming Halasur, Karnataka. (Paper Submited at the CII Seminar on Reforms in the APMC Act 25 June 2005, Hubli.)

The most unregulated, repressed, depressed and undressed sector in our society is the agricultural sector. It is also the most exploited. And the most undervalued.

It was after accepting these facts that the government moved towards legislating the Agricultural Produce Marketing Cooperatives, the APMCs, into existence with the main purpose of safeguarding the interests of the farming community. This was a conscious attempt by the administrators to ensure that 'fair' trade practices were followed while trading in agricultural produce; the State thought that the rapacious trade practices in vogue then, would be restricted if the infrastructure was state owned, the laws, state-enacted, and the management, a combined effort of all the players in the market. Coercion was supposed to be replaced by cooperation.

Laws were enacted to force all trading in one regulated trading yard, the APMC. To avoid replication and to ease enforcement, the number of APMCs in one area was restricted to one. Basically, the state wanted a marketing system that could be easily regulated and would ensure fair trade practices and transparency in management.

Unfortunately, due to negligence, ignorance and irresponsibility on the part of the farming community; due to the greed of the trader; due to the unaccountability of the officials; due to the hunger-for-power of the politician, yesterdays' well-intended law was distorted into something draconian, a system of oppression in which the system itself benefited from the oppression; the oppression of those that it was supposed to benefit!

Facts and figures show different levels of deception and commission at different markets. Some markets that have better people at the helm, than other markets are obviously well run. Though they are the exception to the rule. Usually the official-management-trader nexus in the APMC yard forces the hapless farmers, to sell their produce at prices fixed by powers beyond their control, sometimes, even at prices well below the cost of production. The present law adds to the tightening of the noose around the farmer's neck by forcing the farmer, to take his/her produce to the authorised market yard only. This, in economic terms, ensures or ensnares, a great number of consumers (farmers) of the services of the APMCs. Ensured By LAW.

Imagine, if you were given a chance to begin an economic activity, infrastructure provided by the state, consumers provided by law, with absolutely no risk at all, with minimum effort and all in the guise of cooperation to help the poor farmer. And the law provided you with a high rate of return, why would you want to give it up? Nobody would want to give away the goose that lays golden eggs.

The model APMC Act attempts to change the present situation, by legislation.

The amendment calls for rather far-reaching changes

- private trading yards to be allowed, parallel to the cooperative APMCs,
- \* commission free trade service for the seller/farmer.
- \* private-public management of APMCs.
- \* multiple trading yards to be allowed in one area
- contract farming with industry to be encouraged
- \* consumer/farmer direct marketing
- provision of value addition facilities to be encouraged
- the appointment of professional managers

Looking at it closely it seems to be old news, comparing this with the existing APMC laws one can see a lot of similarity. What the planners and policy makers have done is that they have tried to bring in change, not by addressing the problem, but by choosing a coward's way out.

By introducing this amendment, the state seems to concede the fact that the trader-management Mafia is too strong for them to handle and control. So, instead of revamping the existing APMCs, the amendment calls for private and multiple yards, bringing in competition where presently there exists a loose oligopolistic mafia control. Thereby forcing the APMCs to either cooperate, compete and succeed or to continue to coerce and slowly die out.

In today's world of post GATT, enforced WTO norms of foreign trade and policy where the trader is allowed to buy and sell anywhere; where food is a commodity to be traded for profit; where the state is restricted in its domestic policy for directing and/or encouraging production; where the state is restricted from protecting its weaker section, where the Constitution of India has blatantly been ignored and the central government has taken over powers of the states, in this GLOBAL MARKET scene where the consumer, who has money, is king. In this milieu where stands the small Indian farmer?

Where am I, a farmer, in this scenario? Bound by tradition, economics, a negative value system, by my own feeling of helplessness and now, by law. In this rapidly changing world, I, a farmer, unable to adapt to change, stand as the sacrificial goat, ready to be sacrificed for another's profit. As I stand here questions arise in my mind.

Why should I be restricted in my marketing efforts? That too, restricted to a market that does not appreciate my efforts. Why cannot I sell my produce to whoever I, as a farmer, want to? Why should the farmers discouraged from change?

Is the trader restricted in any way?

The trader is in the business for the making of profit, sure one can appreciate that, but why on my back? And how much? With what effort? Why should the law make it easy for the trader to exploit me? Why should the consumer, already squeezed by rising prices be forced to pay for the profits of the trading community?

Why cannot we, who produce and those who consume our products, trade directly, sharing the profits of coming together, fairly?

The amendment to the APMC Act attempts to change part of that scenario too.

Some practical caution is needed here, as truth does not always prevail and good does not always triumph over evil.

-Take for example contract farming. True, bringing together industry and agriculture can reduce risk, cost and waste for both, increasing profits and efficiency of both. Some other concerns come into the picture now. Unregulated contract farming can lead to monoculture, increase of

monopolistic power of the contractor over competitors, loss of local bio-diversity and can eventually lead to loss of local sustainability. The final policy must address these issues and ensure environmental safety.

-Should APMCs take on value addition or would that be better done by the members of the SHG movement? At the village level?

-Private trading yards sound like a good idea, but what about MNCs? MNCs have to be looked at in the light of the Patent laws under the IPRs regime, the WTO trading norms, their massive financial and lobbying power, the ease of corruptibility of our system and the failure of government to control the co-operative sector. What control will our administration have over large and powerful MNCs that want a share of the Indian agri-market? It is not sensible to allow such unethical, unaccountable and uncontrollable entities to play with our food security. It would be sensible to restrict the entry of MNCs in this sector.

The new policy, if it comes into force, will allow the filling up of a major gap in our production chain. It will lead to the linking of producers with consumers and the realisation of rational pricing. This could in the long run encourage macro agro-economic planning, with the active participation of the micro element, the Farmer, thus minimising national waste and reducing risk and uncertainty in agriculture.

Looking back in history, one can see clearly that the exploitation of the farming community has always helped to build the palaces of many an invader and many a king, line the pockets of generations of feudal lords, even paid for the 'development' of contemporary Nation states. The exploitation of the farming community is as old as the history of civilisation itself. To think that by legislation, the exploitation will stop, is total wishful thinking, day dreaming. The new legislation, will bring in changes. Yes. The exploiters will change, the ways and means of exploitation will change, may be the levels of exploitation will change too. But, the exploitation will continue and the exploited will remain the same.

We farmers will always be exploited, the rural citizens will always pay for the development of the urban and industrial communities.

The amendment, with all the control mechanisms in place, may decrease the oppression of the farmers, it may bring a breath of fresh air in a very mouldy and suffocating system, it will allow enterprising farmers to change their fate.

Legislation by itself will not stop the exploitation. That will need not only some very honest soul searching, it will need a radical change in our value systems, altogether.

#### NADA YOGA: THE YOGA OF MUSIC

- Dr. T.V. Sairam

Chief Commissioner of Customs & Central Excise

The purpose of music is to draw towards a total exaltation in which the individual mingles, losing his consciousness in a

#### truth immediate'. - lannis Xenakis

Long before acoustics came to be understood in Europe as a subject of study, the ancient Arab, Greek and Indian civilizations were already familiar with the therapeutic role of sounds and vibrations and the later day concepts pertaining to them. While music as a whole is well recognized for its entertainment value, the Indian civilizations had gone a step forward to attribute the curative aspect to music.

Indian music is both emotional and intellectual. The unique merger of swaras and their partials and a mathematically precise laya and taala systems, lend the music its intuitive as well as intellectual flavour respectively.

It is a well-known fact that the Indian classical music attaches great importance to serenity and thoughtful state of mind as it primary goal. As such, it helps in balancing the left and right hemispheres of the brain, which are assigned the functions of analysis and intuition respective by the neurologists.

#### Drone and its Psychic Importance

In the Indian systems of music - both in Hindustani and Carnatic - drone is an essential requirement. The drone that emanates from tanpuras can be compared to the state of equilibrium as it fully represents the essence of the musical scale on which ragas can be conceived. Drone, offers the basic framework akin to a balanced mind, which has its inherent capacity to fall prey to emotional upheavals, ascendance or decadence, the same ways a raga could meander.

#### Nada Yoga

The ancient system of Nada Yoga, which dates back to the time of Tantras, has fully acknowledged the impact of music on body and mind and put into practice the vibrations emanating from sounds to uplift one's level of consciousness. It is the Indian genius that recognized that ragas are not just mere commodities of entertainment but the vibrations in their resonance could synchronize with one's moods and health. By stimulating the moods and controlling the brain wave patterns, ragas could work as a complementary medicine.

#### The concept of Nada

The Sanskrit word, 'nada' often ends up being loosely referred to as 'music' in a casual way. Actually, nada refers to a much broader concept of music which includes not only sound and its vibrations but also one's consciousness and the various levels of perception.

Sound waves - for a physicist - involve a series of compressions and rarefactions, causing alternative pressure disturbance that travel through a medium (e.g. air) by particle - interaction. In addition to such 'material' 'physical'. 'Outer' or 'struck' (ahata) sounds, nada also encompasses those sounds which are sui generis, often referred to as 'mystic', inner or 'unstruck' (anahata) in its ambit. Thus, the physical limitations and dimensions that restrict a sound in terms of audibility, amplitude, physical qualities such as timbre, texture etc. are unknown to anahata nada.

While music refers to an organized sound, which is pleasing to the ears, nada has a certain mystic flavour attached to it. It

is believed to have originated from the two mystic syllables (bijaksharas) na and da, derived from breath (prana) and fire (agni) respectively.

In other words, the human perception of sound - whose range is pegged anywhere between 20 - 20,000 Hz along does not come under the purview of nada. Nada is much wider and more expansive, going into the very depths of our existence.

It is rather a concept that goes to the very roots of sound and its experience where oscillations or vibrations make a sound what it is and the way with which the human consciousness gets synchronized with them in subtler levels of our existence.

In this context, overtones, the sounds hovering above a lower sound, which is the fundamental assumes significance. While the fundamental remains the same, it is the overtones, which change in a sort of melodic pattern, repeating themselves in a regular fashion. For instance, when 'sa' in the upper octave is held steadily, the overtones (tarasthayi antara 'ga' and 'pa') could be heard by the connoisseurs as shifting echoes. Becoming aware of them is one of the many practices adopted in the ancient system of nada yoga.

We commit a grave injustice, if we call nada as music, swara as note, tala as rhythm, without appreciating the background of the cultural criteria that go with them hand in hand.

#### Nada: Categorization

Matanga, an ancient sage, categorized nada into 5 types, based on their origin from the human body; navel (atisukshma), throat (pushta), head (apushta) and lips (kritrima). There are other musicologists who have identified the following eight places as the location of nada: head, heart, lips, nose, palate, root of tongue, teeth and throat.

Sangita Ratnakara, an ancient text on music, authorized by Saranga Deva, who came from a family of physicians, has observed the subtle association between the three body humour (doshas) and the voice quality.

| Body Humour                  | Voice Quality                      |
|------------------------------|------------------------------------|
| Phlegmatic<br><i>(kapha)</i> | Delicate, sweet,<br>Humid and warm |
| Windy (vata)                 | High-pitched                       |
|                              |                                    |
| Bilious (pitta)              | Rich and majestic                  |

#### How Nada differs from Music

We have seen that Nada, unlike music, could even be interpreted as consisting of vibrations sui generis. It need not be mentally sculpted or determined, nor is it differentiated from any sound-matrix. It is holistic and absolute. While it is sensory, it can be uplifted along with one's awareness to reach into new terrains of consciousness. Nada yoga considers nada as primordial energy source in the Universe, which forms the substratum for all manifestations around us - and in us.

Known to the physicists as 'resonance', nada refers to an emanation of life-principle with a 'big-bang' origin which the Western Science seems to be reluctantly acknowledging.

#### Nada and Consciousness

Nada Yoga makes an attempt to synchronize the intonation with one's own consciousness. As the system is built on vibrations, mirroring one's consciousness, it is a unique way of altering the consciousness to enjoy the state of bliss.

(Please visit the Author's Website www.drsairam.com and offer your views and comments)

#### 帝 岩 岩

# EMPOWERING VISUALLY IMPAIRED PERSONS(PART-II)

- Dr. C.V. Krishna Rao Retd. Director of Medical Education Govt. of AP

Brief biography of Louis Braille (French), (4-1-1809 to 6-1-1852). The world recently celebrated 196 birth anniversary of the Champion of Visually Impaired, in an impressive and fitting manner. When he was a boy of 3 years, he lost vision, when a small missile struck to one eye, and later due to lack of treatment the other one also, probably due to sympathetic ophthalmitis. His father initiated him to the Code by fixing small rails to wodden planks. Later he joined the school and by the age of 15 years he became teacher in the same school. In the year 1821 with the help of Charles Berger, he created "Braille Code" with 6 dots. Though there is no initial national recognition (B.C.), by 1932, "France Braille Code" was given official status. Then Braille Code (B.C.) is moulded in type writers and many books, keertanas are converted into Braille Code for the full benefit of the blind. No individual has contributed so much to the disabled in general as L. Braille. Finally he breathed his last on 6-1-1852 of consumption (i.e tuberculosis). In his own words "I am blind, about persons, their language, behaviour and incidents. I have no opportunity to know. Hence I have paved way for these."

#### The Visually Impaired are to be provided

- Mathematical B.C., appropriate material and devices, along with appropriate teaching techniques and strategies
- 2. Use of concrete objects
- 3. Use of the body as a reference point
- 4. Capitalisation of past experience
- 5. Facilitating the home by moving objects
- 6. Imparting toiletting, brushing, personal hygiene, dressing eating.
- 7. Use of ICI or computer based technology etc.

Presently they are good at working in small scale industries, sports (games & atheletics), lecturing, on any subject, competitive, self sufficient, self supportive and like happily. Lucky, they are blessed not to see or know about corruption, manipulation, cheating and so on. They have only one thought process in this world, unlike the rest. Success is their yardstick.

## IMMANUEL KANT (1724-1804 c.e.) - II

- Sri C. Sivasankaram

"Fire destroys wood, the proverb says, but strengthens the iron" The iron in the soul of Kant was irrevocably strengthened by the continued spell of adversity. He looked every inch a weather beaten personification of a man in distress carved by a sculptor of high imagination and installed at a sequestered point. In his public life as a student of the university he never appeared crushed by the dogged bitter conditions.

He took good care of himself with German meticulousness and scotch perseverance. The three Ps-purity, patience and perseverance recommended by Swami Vivekananda as means for a triumphant, purposeful and meaningful life were at vigilant active work with Immanuel. The pietist teachers ingrained in him the highest that man can possess-that peace, that cheerful spirit, that inner harmony with self which can be disturbed by no passion. Mentally and spiritually well-built Immanuel entered the Konigsberg University. Privation at home got no display on his person. His dress was as neatly pressed as his thoughts. Immanuel preferred philosophy to theory. Like the noble Aristotle of the Academy of Plato of Athens, Kant with gusto became a thorough student of science and developed assiduously fine scientific temper. Philosophy and science are not strange bedfellows but two means to attain to the Truth. The paths of quest will not be at war with each other if not cooperative. Philosophy emphasizes that there exists one self-evident. This self evident and existen is hardly questioned by science nor has it ever attempted at disproving the one. For it too resorted to the mystic Energy in the hour of dilemma. An amicable coexistence of the two, prudence suggests, is necessary for a halcyon world.

Kant had a profitable dip along with the abstractions of metaphysics in the realities of physics, geometry, algebra, psychology, astronomy and logic. He earned in that way the epithet, polymath. Two thousand years before Kant, Aristotle of Athens enjoyed the distinction of polymath. For Aristotle man is nothing short of a savage if not of philosophy.

Kant struggled hard, harder than anybody in history in similar circumstances. Despite hideous hazards and demeaning odds he kept cheerful spirit and inward and outward calm. By his undampened versatility and steafast adherence to puritanical habits he, in course of time could cut figure in the society of the day in Konigsberg.

Kant, primarily a scientist, (not first and last) he wrote treatises on fire, wind, natural history, anthropology, the theory of the Heaven, The Aging of the Land. In spite of this leaning towards science he was more speculative than analytical. His motley inclinations and intentions were to formulate an integral unit of truth out of the many motley conflicting theories let loose by different thinkers in different ways contributing more to confusion and chaos rather than to presenting an integral philosophy adoptable and practicable by mankind. With Scotch perseverance coupled with German exactitude the philosopher scientist opened the book of his life before long.

Kant is considered as the greatest of modern philosophers and founder of German idealism. The history of Western philosophy looks pale without Plato and Aristotle of B.C. Greece and Hegel and Kant of Germany C.E. Hegelian doctrine conduced to the springing up of class-struggle theory of Karl Marx. Marx is the greatest Jew after Jesus Christ. He is the father of modern socialism. Socialist thought underwent good fortification by the infusion of British economics. For Karl Marx lived the best productive years of his life in London. British museum was the central point in the moulding of the great author of Das capital the Testament of Dialectical Enquiry. Pandit Nehru dismissed Marx as an incorrect prophet. Kant and Hegel maintained good cordial relations throughout their profound philosophically stimulated lives. Hegel as an interesting dynamic subject needs a special study. By a minute study of the two giants there surfaces marked difference in each of their philosophies. This did not interfere with their philosophy of dispassionate comradeship.

Kant gained sparkling image of his own. He churned out by the inward "strife" an egalitarian philosophy which fashioned man as equal of self.

All things perceived by senses are finite and evanescent, over and above there exists a sense defying the apprehension of both mind and word. Things comprehended by mind even when it was in its highly elevated state were impermanent and subject to perennial change. Supposing is not realizing. The unconditioned and infallible infinite one alone realizes reality. This is the thought of Kant. Adwaita Vedanta wellnigh is akin to it. Happily nondualist thought prevented and saved the world from being balkanised on the basis of bigotry, doctrinarism and dogmatic narrow and sectarian persuasions preposterously exaggerated by few in the name of religion. The view of dwaita or manifold is the enemy of mankind.

The God or Brahman of Vedanta unified, vivified and finally presented himself as the string on which gems of various hues were culled into a garland. This was the mute mutiny peacefully effected by Vedanta. The opiate of religion lost its numbing power. The Vedanta regards the world as a misreading of God. It makes out that the term manifestation is a misnomer. It is God visible, tangible and enjoyable. The Digambara aspect of Samkara is nature naked and unveiled and fullblown. By the affiliation and association of Nature (maya) God becomes Eswara. Matter and Spirit form into a single whole impossible to divise presenting as one without a second. To know God in His true perspective we require the eye of knowledge. In fact the theory of a sustainer and a thing sustained is blown to pieces by the startling revelations of subtle Vedanta system.

Kant distinguishes three levels of cognitive activity, the Aesthetic with the forms of perception, the Analytic with the categories of the understanding and the Dialectic with the ideas of Reason. Kant says with concrete authority that there can be no theoretical demonstration of the immanence and existence of God, though we need Him for practical life. Vedic philosophy determined three levels of the presence of God (1) Kshara (2) Akshara and (3) Transcendent witness self. The theory of Kant is that what is perceived by the aid of senses is fallible and what is mystically felt at heart is infallible had the approval of Vedanta system. The witness self or Brahman of the Upanishad is the Sanatana, the constant.

Dr. S. Radhakrishnan opines that the great German orientalist Paul Deussen in his writings attempts to make out that Parmenides, the fifth century B.C. Greek philosopher, Samkara and Kant conform to single philosophical pattern. In another context Dr. Radhakrishnan says that German thinkers stimulated the intellectual life of other nations including Britain and India.

(To be Continued)

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