

There is not enough funding for basic sciences in India. We have to invest in a big way, and I am pushing that idea.

-A. P. J. Abdul Kalam

## TERRORISM ON ITS LAST LEG

The situation in J&K has turned promising as terrorism has been wiped out from the region to a large extent. It is to be noted that the 'violence' which the people are confronting right now is the residual of what used to be the big problem in the past because still there are elements in the society who are adamant and not budging to shun this wrongful path. The number of people who are inimical to peace has turned insignificant as security forces have sanitized the Union Territory in a big way with no big name involved in terror activities or leading any of the outfts of terrorists remaining alive today. The courtesy for such a big leap in containing the vicious cycle of violence and threats and fear psychosis all goes to valiant security personnel who gave their everything to ensure peace and tranquility in J&K and for this the people of the UT will remain indebted to them and their families. It has been averred by the LG Manoj Sinha, DGP J&K Dilbag Singh and the top level army officers serving in the UT number of times that terrorism is on its last leg and the time is not far when the most beautiful union territory of the country will become free from the scourge of violence that had gripped the entire region for the past over three decades. In this context, the statement by the DGP Dilbag Singh that almost all the cases of targeted killings have been solved and infiltration is all time low in J&K holds much significance because he is the man who has all the information regarding the ground situation in the UT and his endorsement to the fact that there is decline in terrorism means a lot. One can say that the time has come when the government can declare with assertion that terrorism is all set to die soon and good old days are about to come back in Valley with people having all the avenues to lead a prosperous life as gun culture has become a thing of the past. Whatever is coming out today in the form of threats to minority community members in Valley is the last attempt by the enemies of peace and stooges of Pakistan to revive the unrest but the security forces' grid is quite strong this time and any attempt to disrupt peace will be foiled with iron hands. It is the time that those entities which left the Valley in distress about three decades ago should all plan their return and future in the place where they spent their childhood and where they learned to live in a homogenous culture with peace and brotherhood remaining the top priorities as anytime soon the PM could declare that J&K is free from terrorism and there is no terror monger left to disturb the peace in the region.



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### Get Going Beyond The Mind

The mind is the only problem. Hence, philosophy comes up with many solutions, many conclusions, but no conclusion is conclusive. Immediately, many more problems pop up. Not one single question has been solved by philosophical endeavour, but still, philosophy goes on and on moving farther and farther into the desert. It cannot reach the ocean; it is going basically astray. That's where religion differs. Religiousness means not trying to solve particular problems, but looking at the root of all problems and cutting the root. That is what we call meditation: meditation is cutting the root. It solves nothing. It simply helps you to get rid of the mind, the problem-creator.

The Answer  
Once you know that you are not the mind, the great transcendence has happened. Suddenly, all problems become insignificant; slowly they evaporate. You are left with a profound peace. This peace is the answer of all answers.

This is the miracle of religion, or the miracle of meditation to be more specific: that without solving a single problem, it solves all problems in a single blow. It is a sudden leap, a quantum leap.

The moment you think, you create it; and once you have it, you start looking for solutions. And who will look for solutions, and where? The mind will look for the solutions — and in the mind! Do you see the absurdness of it all? It is like pulling yourself up by your shoestrings; it is not possible. ]

Yes, mind will fabricate many solutions, but they will only be superficial. The basic question will remain untouched and many more will arise, and it is a process — ad infinitum.

This period of transition is the most difficult period for every meditator — he starts falling apart. If you go to a psychologist he will say, 'This is a breakdown.' It is not a breakdown; it is a breakthrough, but psychology still has no idea

of the breakthrough. Hence, psychology is groping in the dark because it is still unaware of the fact that a man can go beyond mind.... The word 'psychology' is beautiful: it comes from 'psyche', and psyche means 'the soul'. But no psychologist agrees with the idea of soul.

They are all either believers in the body or believers in the mind, which are not really separate things. 'Mind-body' is one phenomenon.

The body is the outer expression of mind and the mind is inner expression of the same phenomenon — just in two different dimensions.

A Breakthrough  
Unless one goes beyond both, one never knows anything about the breakthrough. And man is falling apart all over the world because of this idea that man is nothing but body or nothing but mind, or at the most, both. A breakthrough is possible if there is more space available inside you so that you can put the mind aside and still be.

When the skin of all the past, all memories, is dropped, there are moments, when you are nowhere. You are neither the old nor new; you are just passing through the birth canal. It is painful too, because the old identity is disappearing and the new has not yet arrived.

Those nine months are nine months for people who are outside the womb; for the foetus it is almost infinity because he is not aware of time; he cannot be aware of time.

You become aware of time only when there are events happening. But nothing is happening in the womb, all is quiet. The child cannot feel that this is only nine months; it is infinity, it is a timeless state. And floating in the mother's womb in a warm liquid is immensely pleasant.

The whole search for godliness is basically the search for the mother's womb. And the meditator really enters into the womb of existence.

-Osho

# Homage to Ramanujan mathematical phenomenon of the twentieth century

■ VINOD CHANDRASHEKHAR DIXIT

Every year, 22 December is observed as National Mathematics Day to mark the birth anniversary of Srinivasa Ramanujan, a legendary Indian mathematician. Mathematics plays a crucial role in understanding all sorts of subjects such as science, music, social studies and even art. Srinivasa Ramanujan was a famous Indian Mathematician who lived during the British rule in India. Ramanujan was born on 22nd December 1887 into a Tamil Brahmin family in Erode, Madras. His father, Kuppuswamy Srinivasa Iyengar hailed from Thanjavur district and worked as a clerk in a saree shop. His mother, Komalatammal, was a housewife and used to sing at a local temple. They lived in a small traditional home. He became well versed with the Brahmin culture and followed particular eating habits. Just before turning ten, he passed his primary education in English, Tamil, geography and arithmetic. His scores were the best in the district.

Ramanujan was one of the greatest mathematicians of India whose contribution to the theory of numbers has been profound. He was indeed a mathematical phenomenon of the twentieth century. Hemade some important contributions to the discipline, including number theory, infinite series, mathematical analysis, and continued fractions. He was deeply religious and united spirituality and mathematics. For him the zero represented the Absolute Reality. Researchers are still struggling to understand the source of his remarkable genius in mathematics. Since childhood, he was drawn towards maths and took a particular interest in learning the subject. He did not receive formal education in mathematics



but had mastered maths in various sections. During his time in Cambridge, he grew close to the great mathematician named Hardy. He had been dealing with health problems since childhood. However, around 1918, he was diagnosed with tuberculosis after which he returned to his family in India and died in 1920.

Ramanujan found mathematics as a profound manifesta-

## BJP's brand of cultural nationalism

■ OMKAR DATTATRAY

The BJP's politics and BJP as well can be distinguished and differentiated from other political parties because of its distinct ideology, thinking and philosophy. Thus abrogation of controversial article 370 which has since been abrogated and is now a history, Ram Janamboomi temple issue which also stands resolved and the uniform civil code for all Indians which is still to be realized are the constituents of BJP's distinct ideology and because of these three and also for its Hindutva philosophy BJP becomes a distinct political party. The cultural nationalism what is called in chaste Hindi as Sanskritik Rashtriwad is the pet theme and corner stone of the politics and philosophy of the saffron party and it also make BJP a distinct political party. The right wing political party -BJP works hard to follow and adopt cultural nationalism in letter and spirit. The cultural nationalism is in fact the pivot round which the politics of BJP revolves and this party tries hard to realize the goal of cultural nationalism and bring a positive change in the politics of the country by reviving and restoring the ageold cultural roots of the nation and awakening the national pride in the cultural ethos of the country. Thus connecting with the cultural roots and strengthening these glorious roots is the for making India again a culturally rich nation in this age of science and technology is one of the aims of BJP. So once again making India a world leader and vishwa Guru in near future is the litmus test of the success of the politics of BJP. The BJP is respecting the national cultural legacy and

also trying hard to make the people to respect the country's rich and dynamic cultural ethos for making India to shine with its unique beauty of unity in diversity which is the hallmark of its vibrant and dynamic philosophy and political ideology. BJP is a cadre based and disciplined party which has got firm and strong roots in the culture and politics of the country in a short span of time from its inception and birth in 6 April 1980 and its founding fathers are Late A B Vajpayee and L K Advani. It is in the fitness of things to know what cultural nationalism means and implies. Cultural nationalism is the nationalism in which the nation is defined by a shared culture and common language, rather than on the concepts of common ancestry or race. Cultural nationalism does not tend to manifest itself in independent movements but is usually a moderate position within a larger spectrum of national ideology. Thus moderate positions in Flemish or Hindu nationalist might be 'cultural nationalism' while these same movements also include forms of ethnic nationalism and include national mysticism. Membership in a nation is neither entirely voluntary nor hereditary. The cultural nationality is not achieved through citizenship as in civic nationalism. The mother organization of BJP, RSS -one of the main votaries of Hindutva had stated that it believes in a cultural connotation of the term Hindu. The term Hindu is the conviction as Buddhists, Jains well as constitution of RSS is a cultural and civilizational concept and not a political or religious dogma. The term as a cultural concept will include and did always include

all Sikhs, Buddhists, Jains, Muslims, Christians & Parsis. Cultural nationality of India in the conviction of RSS which is the mother of its political offshoot BJP is Hindu and it was inclusive of all who are born and who have adopted Bharat as their motherland, including Muslims, Christians and Parsis. Thus it is not only the matter of conviction for RSS but a historical fact that Muslims, Christians and Parsis too are Hindus by culture although as religions they are not so. Cultural nationalism was founded on the belief that blacks and whites have separate values, histories, intellectual traditions and life styles and therefore that in reality are two. Cultural nationalism sets out to provide a vision of nations identity, history and destiny. The key agents of cultural nationalism are intellectual and artistic who seek to convey their vision of the nation to the wider community. In much of the scholarly literature, cultural nationalism has become a stretched concept, encompassing the full gamut of cultural practices and texts. We can say if political nationalism is focused on the achievement of political autonomy, cultural nationalism is focused on the cultivation of a nation. Here the vision of the nation is not a political organization, but a moral community. As such, cultural nationalism sets out to provide a vision of the nation's identity, history and destiny. The need to articulate and express this vision tends to be felt most acutely during times of social, cultural and political upheaval resulting from an encounter with modernity. Cultural nationalism often occurs in the early phase of a national movement, sometimes

before an explicitly political nationalism has appeared. But it can also periodically recur in long-established national states. Whatever it is the fact remains that cultural nationalism is the corner stone and mainstay of the BJP politics and all its acts are but the manifestations in some way or the other of the cultural nationalism. The saffron party strives to preserve, protect and follow this ism with all its spirit and fervor. We cannot distance BJP from its pet theme and philosophy of cultural nationalism and if it is tried it may prove counterproductive. The BJP through its various activities tries to protect, follow and strengthen cultural nationalism for the sake of the nation's culture and identity. Therefore BJP and cultural nationalism cannot be separated and divorced from each other. The very foundation of the BJP is based and cemented on cultural nationalism and therefore it is unnatural to try to separate them without bearing bad consequences. At least BJP deserves appreciation for the fact that it reminds the people of the country of their rich cultural legacy and glorious ethos and past pristine beauty which would perhaps be not possible without this party which teaches and practices cultural nationalism. In brief we can say that the theme of cultural nationalism is running in the blood and veins of BJP and they saffron party will loses its distinct character and relevance without cultural nationalism. Thus BJP and its pet theme cultural nationalism are inseparable and any effort to separate them is bound to fail.

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## Horticulture as an Enterprise in J&K

■ DR. BANARSI LAL

Union Territory of Jammu and Kashmir is endowed with a wide range of agro-climatic conditions which are conducive for growing different kinds of horticultural crops. The agro-diversity of J&K varies from sub-tropical in Jammu region to temperate in Kashmir region. The average annual rainfall of these two regions is 1069mm and 660mm. The average temperatures of these two regions are 24.5 and 13.3 Centigrade respectively. Horticulture sector is the backbone of J&K's economy. There is an immense scope for strengthening various commercial horticultural activities to enhance the income of the farmers. Horticultural sector contributes immensely to strengthen the financial condition of Union Territory of J&K. This is a core sector of Jammu and Kashmir agriculture and about seven lakh families are directly or indirectly engaged in it. This sector also creates employment in other trades such as farm machinery, fruit processing units, pesticides etc. About 20 per cent area of J&K is under horticultural crops. Horticultural sector contributes about Rs.10,000 crores to the annual income of J&K. Area under horticultural crops has also increased steadily. Seventy per cent of total apple production and ninety per cent of dry fruit production in the country produced from J&K. Among the horticultural crops in J&K apple occupies the predominant position constituting about 55 per cent of the total area under fruit crops. Major thrust in horticultural activities is given in hilly areas of J&K. The fruit crops grown in J&K are apple, almonds, walnuts, pears, cherries and apricots in temperate areas and mango, citrus, litchi, Ber, papaya, guava etc. in subtropical areas. Saffron cultivation in J&K is unique in the world. The annual production of Saffron in J&K ranges from 10 to 20 tonnes. The J&K government is making strenuous efforts to increase horticultural crops production. SKUAST-J, SKUAST-K and Department of Horticulture are making strenuous efforts to introduce new innovations in the horticultural sector in J&K. Incentives are given to the fruit crops growers to develop fruit orchards in J&K. Subsidy to the extent of 50% of fruit plants and inputs used by the farmer are provided. It has been observed that around 40 lakh tones of fruits are exported annually from the Union Territory of Jammu and Kashmir. In horticultural crops post-harvest losses range from 15-20 per cent. In J&K about 94 per cent of the land holders fall in the category of small and marginal farmers.

Horticultural sector contributes significantly to the economic and ecological development, employment generation, export and nutritional requirement of the people of Jammu & Kashmir. Horticultural crops are adapted to a wide range of climatic conditions, produce higher biomass per unit area as compared to field crops, are more remunerative for replacing subsistence

farming and thus may aid in alleviating poverty in difficult agro-ecosystems as rain fed, dry land and hilly areas of J&K. There is also great potential to improve wastelands for productive use in the Union Territory of J&K. If grown commercially horticultural crops can provide employment opportunities round the year to the people of J&K. Increase in demand for horticultural produce due to great health awareness, rising income, export demand and increasing population poses the challenge for further increasing the production and productivity of horticultural crops. The issue of climate change and climate variations has resulted in more uncertainties and risks in this already high capital intensive system. This has resulted in further aggravating the constraints on horticulture production system. The major challenges before us is to have sustainability, higher levels of production, competitiveness to stay in market, regular production, land, water and more importantly threat of climate change. In order to mitigate the above challenges, we need innovations for improving horticultural crops production in J&K.

In order to increase the production, productivity and quality of horticultural crops in J&K, there is dire need to focus on the adoption of innovative technologies developed by our research innovations and development efforts. There should also be attention on reducing the cost of cultivation and increasing the more returns in horticultural sector. In this case natural farming and organic farming can play a significant role in reducing the cost of cultivation and increase in the quality of horticultural crops produce. We should utilize our research and development to increase the fruits and vegetables production. In order to increase the production, productivity and quality of produce and reduction in the cost of production, our research institutes/centers have identified certain key areas and have generated current knowledge in this area which needs to be disseminated to the farmers in a systematic way so that farmers are enabled to increase the area under fruits and vegetables, adopt the modern technologies, use the optimum inputs and achieve the desired demand of horticultural crops.

Production of horticultural crops can be increased by increasing the area and by applying the scientific production technology. In J&K it is difficult to increase the area under these crops but still there is possibility to increase the area by adopting the methods such as (a) By utilization of land through inter-cropping/mixed cropping in existing orchards, growing crops in the vacant lands. (b) Development of appropriate varieties of horticultural crops suitable reclaimed wastelands and dry land regions. (c) Adoption of cost effective poly house technology. (d) High density planting by reduction in planting by reduction in planting distance or by use of plant growth inhibitors and dwarfing rootstocks in crops like mango, citrus, banana, apple and some

other fruits. Productivity can be increased by bringing maximum possible area in a systematically drawn plan of five years under high yielding or rejuvenating the already existing orchards along with full package of innovative practices. It can help in improving the quality of produce and reduction in the cost of cultivation. In the conventional methods of crop improvement both desirable and detrimental genes get transferred from parents. The modern biotechnology system helps to insert single or more than two desirable genes into the crop. Traits can be modified through the genetic engineering that helps to increase productivity and improve the nutritional quality.

This technique helps production of uniform size, shape, size and colour of horticultural crops. Micro-propagation is the most popular technique for production in the world and supply of identical plants. Propagation technique through tissue culture and molecular indexing for culture of diseases are of immense use in making available healthy and quality planting material. Micro propagation protocol has been developed in various horticultural crops such as banana, grape strawberry etc. In present era farm mechanization is very much helpful in reducing the cost of labour and conducting timely farm operations efficiently and effectively. For mechanizing cultivation of horticultural crops, implements have been designed for the use of horticultural crops growers. Integrated pest and disease management helps us to judiciously use the plant protection methods viz. cultural, biological, chemical, physical/mechanical or regulatory control methods. Micro-irrigation and fertigation techniques need to be popularized among the horticultural crops growers of J&K. Under this system, water is applied at a low rate for a longer period at frequent intervals. Greenhouse technology can modify the environment for optimum plant growth and production of uniform and high quality horticultural crops produce. Organic farming contributes in improving the quality of horticultural crops which have high potential export market. Major components of organic farming are addition of organic manures, adoption of crop rotations and enhancement of soil fertility through biological fixation of nitrogen. Proper post-harvest management reduces the post-harvest losses by proper handling and packaging and adoption of suitable low cost storage infrastructures. There is need to establish the quality control laboratories to ensure the exporters that commodities being exported get international standards. Research institutions should also take lead role in providing the proven technologies to the horticultural crops growers and demonstrate the effectiveness of technologies on horticultural crops growers' fields for the final adoption.

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