

SHIFTING TOWARDS  
RENEWABLE ENERGY

It has been felt that despite making all possible initiatives, the present Government under the dynamic leadership of Prime Minister Narendra Modi, is finding it hard to meet the energy requirements of the country, due to which the crisis is intensifying with every passing day. But this problem has not erupted in a single day, week, month or a year, but it is result of the apathy of the earlier Governments towards the crucial sector, due to which at present people are facing numerous hardships. Major replacement of non-renewable sources of energy, which is constantly decreasing, are renewable sources of energy, which should be nurtured at the maximum possible limit. With a population of 1.3 billion, India has a massive demand for energy to fuel its rapidly growing economy. From a power deficit nation at the time of Independence, the efforts to make India energy-independent have continued for over seven decades. Today, we are a power surplus nation with a total installed electricity capacity of over four lakh MW. Keeping in mind the sustainable development goals, India's power generation mix is rapidly shifting towards a more significant share of renewable energy. Today, India is the world's third largest producer of renewable energy, with 40 per cent of its installed electricity capacity coming from non-fossil fuel sources. As a developing nation at the time of Independence, India relied heavily on coal to meet its energy demands. However, India has always been committed to looking for more alternative energy sources for sustainable development. The beginning was made with hydropower, with major hydroelectric power projects appearing on the scene of India's energy arena. Over the years, many policy and regulatory initiatives have promoted hydropower development and facilitated investments. Today, we are 5th in the world regarding usable hydropower potential. Bhabha Atomic Research Centre (BARC) was founded in the 1950s to secure the country's long-term energy independence. Today, we are the only developing nation with indigenously developed, demonstrated and deployed nuclear reactors for electricity generation. This was made possible through several decades of extensive scientific research and technology development.

Work on wind energy started in India during the 1960s when the National Aeronautical Laboratory (NAL) developed windmills, primarily for supplying irrigation water. Today, we have the 4th largest wind power capacity in the world, blessed with a constant movement of wind, especially in the Southern, Western and North Western regions. Solar energy-based applications have benefited millions of Indians by meeting their cooking, lighting and other energy needs in an environment-friendly manner. Having achieved large-scale success in solar energy solutions, India has spearheaded the International Solar Alliance (ISA) which is an action-oriented, member-driven, collaborative platform for increased deployment of solar energy technologies. The membership of the ISA is open to all member-states of the United Nations, and 107 countries are signatories to the ISA Framework Agreement at present. The Alliance aims to efficiently utilise solar energy to reduce fossil fuel dependence, thereby creating a greener planet.

Biomass has also been an essential source of energy for India. It is renewable, widely available, carbon-neutral and has the potential to provide significant employment in rural areas. Rapidly evolving technology has enabled thermal power plants to have more economical and energy-efficient operations. India has co-fired biomass in thermal plants across the country to reduce its CO2 footprint in thermal power generation. biomass power/co-generation programme since mid-nineties. Over 800 biomass power and bagasse/non-bagasse cogeneration projects have been installed in the country for generating power to the grid.

India has progressively decoupled economic growth from greenhouse gas emissions. For example, the Net Zero Emissions target by 2030 by Indian Railways alone will reduce emissions by 60 million tonnes annually. Similarly, India's massive UJALA LED bulb campaign is reducing emissions by 40 million tonnes annually. To further complement these ongoing efforts, India launched the National Hydrogen Mission in 2013 to make India the world's largest hydrogen hub. The global power sector is undergoing an accelerated transformation due to technological innovations and response to climate change protocols. At COP-21 in Paris in 2015, India committed to a 40 per cent share of power generation from non-fossil fuel sources. We have achieved this target a decade ahead of the 2030 timeline. India's experience will be valuable to other developing nations as they translate their climate pledges into actions and undertake energy transitions towards a more sustainable energy future.

**OFF 'D' CUFF**  
Life is not real. It is like a dream!

Suppose I borrowed one million from you in your dream last night. When you woke up this morning, would you come to me to recover that one million? You dare not because I did not actually borrow money from you. It was just a dream. Dreams are dreams and we know it. Nothing that happens in a dream actually happened. Therefore, when we wake up from a dream, we just rub our eyes and move on.

We know the difference between dreams and life. Dreams are dreams, but we believe that life is real. If I actually borrowed one million from you in life, there are few chances that you would forego that one million. You would chase me till you recover that money because I had actually borrowed that money from you. Why? Because it was a 'real'ity, not a dream.

We have learned to differentiate between dreams and life. We have learned to forget dreams, in fact, we cannot remember dreams at all. But we have learned not to forget the reality of life. It is etched in our memory and becomes a part of our life. However, what we have not learned is that life too is like a dream. It is an illusion. Everything that is happen-

**Air Atman In Ravi**

With increasing age, dullness of mind and heart sets in.

-Jiddu Krishnamurti

## EDITORIAL

## Increasing road accidents in J&amp;K

■ OMKAR DATTATRAY

The alarming increase in the road accidents has become a talk of town these days in Jammu and Kashmir and it is very shocking because it leads to the killings of the innocent precious lives and also injuries to many. Unfortunately J&K is facing road accidents almost daily and it is a cause of utmost and grave concern to the government of the Union Territory and the general public as well. Hundreds of precious lives are lost in these road accidents, which is really very sad. In reality, these accidents take a heavy toll of precious human lives. The road accidents in Jammu and Kashmir are hogging the TV and radio headlines. As one switches on the TV or radio one hears the bad news of some road accident taking place and the passengers been killed and some injured. It is hair raising for the people to hear the bad news about the unfortunate road accidents on the national highway near other Ramban, Banihal, Doda, Kishtwar, Poonch, Rajouri, Udhampur, Katua, Samba and where not. The road accidents take place everywhere in the territory of Jammu and Kashmir and innocent human lives are lost in these road accidents. During the last one year there has been a steep increase in road accidents in J&K with a large number of the people losing their lives as a result of the accidents and falling victim to these accidents. A big number of the passengers get injured in the road accidents and some are handicapped as they lose legs and some lose hands. It is a harrowing seen to see the accidents and the rescue operations militancy related deaths in 2021. The figures reveal that last year 728 people were killed and 5894 were injured in road accidents in J&K while the number was 996 deaths in 2020. Over 8000 accidents and 1750 deaths on Srinagar-Jammu highway in the past decade had happened and experts blame bad engineering for all such catastrophe. In three years highway accidents claimed 2708 lives in J&K in 16834 fatal road accidents on highways. A day before writing this write up there was a car accident in Ramban in which a car collided with a container and three people lost their lives including national level women players. Besides on the same day an accident took place in Kathua in which two persons were killed. Thus the situation is alarming and the government needs to take these road accidents very seriously. The government needs to take serious view of these road accidents which

have become almost a daily occurrence. The government should exert its pressure and show its existence by taking concrete steps to prevent and reduce the accidents. The increasing number of accidents is a big challenge to the government especially to the traffic department and traffic police. But the government and traffic and executive police only cannot prevent and reduce road accidents. The Transport operators, bus drivers, conductors and the general people should play their positive role and cooperate with the governmental agencies to reduce and prevent road accidents. The shabby condition of majority of roads particularly the road between Ramban and Banihal is vulnerable to road accidents so often and therefore steps need to be taken to improve the condition of roads and macadamize the roads on priority so that the roads become accident free. Another reason which is the cause of the road accidents is overloading and over speeding. The buses ply on the roads jam-packed and the speed of the buses and matadors is very fast which more often than not result in shocking road accidents which consume a big number of the innocent passengers. The use of alcohol while driving is the main cause of the road accidents and the drivers should not take wine while driving because it leads to accidents and loss of human lives and also to serious and ordinary injuries. The government should improve the condition of roads and also should not allow the drivers to run vehicles in drunken condition. Those drivers who are driving vehicles while drinking should be challenged and punished and their licenses should be withdrawn. The drivers should be Challaned or fined on spot for over speeding. Moreover those drivers who indulge in overloading should also be Challaned or alternatively fined so that the accidents will not happen and shock the people. The accident scenes are heart rending and heart wrenching and as such these should not be allowed to happen. For this the government, its traffic department should take all the necessary steps to arrest the trend of increasing accidents so that the precious lives of the passengers are saved. The pertinent question is why the accidents take place at an alarming rate and continuously? There is no single cause which contributes to increased number of road accidents but a multiplicity of causes lead to road accidents. The rash driving and over speeding is a very important cause of road accidents. The drivers are habitual of driving the

vehicles at a fast speed unmindful of its dangers and consequences and it often results in accidents which consume lives of the people travelling in the vehicles which are operated at a high speed. Similarly overloading and jam packed vehicles is a dominant cause of the happening of the accidents. The bus and matador operators often indulge in overloading for making quick money and this often not result in accidents which cause the loss of lives and also leads to injuries to many passengers. The drinking and consumption of alcohol and driving vehicles in drunken condition is a major cause of accidents. The drivers often use and take alcohol while driving and this mixing of alcohol and driving leads to accidents so often. The shabby roads is also a cause of the accidents because some roads are damaged and are in a very bad condition and plying of the vehicles on such roads is often risky and leads to accidents which are avoidable if proper caution and alertness is shown and adopted. The rash driving coupled with the habit and practice of overtaking often causes accidents which lead to the loss of precious human lives and also injuries to many. The governor of the erstwhile state of Jammu and Kashmir had constituted a high powered committee to probe the road accidents and suggest the measures to avoid these rising road accidents and one does not know the fate of this committee. The present UT government should frame a committee of experts to probe the cause of increasing accidents and find ways and means to avoid increasing number of accidents in future so that the lives of the passengers are saved. There is need to implement and use traffic laws and regulations to regulate the movement of traffic especially on the national highway of Jammu-Srinagar to avoid the increasing road accidents. Those drivers who indulge in rash driving should be taken to task and their licenses should be seized and they should also be Challaned and also fined to make them to adhere to traffic rules and laws so that the accidents will be at the first instance avoided or minimized so that its impact will be less on the people. In the same way those drivers who do overloading should be either be fined or Challaned in the court of law for disobedience of overloading. The jam packed buses and matadors should not be allowed to ply on the busy roads so that the accidents will be avoided. The drivers who are

found drunk while driving any vehicle should be penalized by fining them with handsome amounts, so that they may not drink while driving. Alternatively those drivers who resort to drinking while driving should be Challaned for the crime of taking wine while driving. Those drivers who use alcohol while driving expose the passengers to high risk of accidents and in most of the cases the accidents happen and take a toll of the innocent and precious lives. Therefore, as far as possible alcohol should not be consumed while driving as it more often than not led to accidents which h otherwise were avoidable but for the bad habit of drinking. So, driving and drinking should both be avoided and this will go a long way to save the lives of the passengers. The traffic cops should take stringent action against the traffic rule violators and they should make accident free journey possible by reminding the drivers and conductors of the right way to operate the vehicles. The laws only will not make significant improvement in the traffic management but there should be information and awareness about the traffic laws and regulations among the general public. Thus there is need to arrange traffic awareness programmes in schools, colleges and universities so that the people on their own will show respect and regard to traffic laws and they are made aware about the dangers and hazards of the accidents. Moreover training courses should be conducted for the drivers, conductors and other persons associated with the transport and driving. No one should be allowed to drive a vehicle without [proper license. Only government cannot make it possible to avoid the recurrent and continuous accidents but the general masses should also play their role in curbing road accidents so that the human lives which are very precious are saved. The general public should cooperate with the governmental agencies to ensure that the alarming increase in road accidents is avoided. To conclude it can be said that in the present age of science and technology road accidents have no place and these should not happen at all. For this the government, traffic department, traffic police & the executive police as well as the common masses should cooperate to ensure that the road accidents are avoided or are minimized to save the precious human lives.

(The author is a columnist social and KP activist).

## Peace must prevail

■ VIJAYKUMAR H K

We observe International Day for Peace on September 21st of each year. The large bell known as the 'peace bell' was donated to the United Nations by Japan in 1950. Two times a year, on the first day of spring, as well as on September 21 to mark International Day of Peace, the bell is rung. Given the current circumstances, it is imperative that all nations choose peace over conflict. Everything on this globe looks beautiful when there is only peace. This year, the bell needs to ring louder in order to specifically reach the ears of the nations who are both directly and indirectly engaged in conflict. The world has been battling the pandemic for the past two years, but the war against COVID-19 is still far from over. In the interim, some nations have been engaged in territorial disputes. So peace is an important topic at this time. What we call in Sanskrit Shanti Mantra is most required now. Here, it is possible to recall the tale of Alexander the Great. The ancient Greek Alexander the Great oversaw numerous military operations and built one of history's biggest empires, spanning from Greece to India. He completed all of this work when he was just about 30 years old. Alexander was ill when he got back to Babylon. As he lay dying, he reflected on the immense empire he had created, every single war booty he had taken and the power of his military apparatus. He fell into a deep despair after realizing that nothing was worthwhile because, despite living a very good life, he would eventually pass away. Before leaving, he wanted to spend one final moment with his mother; but he knew he would not be able to do it and would soon pass away. He made three final requests to his devoted Generals over the phone before passing away. "My first wish is that my doctors should alone carry my coffin," he reportedly said to his devoted generals. "My second wish is that the road leading to my grave be strewn with gold, silver and all of priceless items in my treasury, while my body is being brought to be buried. My third and final wish is to have both of my hands left hanging outside of my casket." The three wishes shocked the Generals, who questioned Alexander about the unusual requests. Alexander's first response was, I want my doctors to carry my casket so they may

spread the message that no doctor can cure anyone. They are helpless and helpless to prevent death. The second is to scatter gold, silver, and other precious stones along the path leading to the cemetery to demonstrate to the public that, despite having spent my whole life acquiring wealth, not a single grain of gold will accompany me when I depart this world. When one yearns to be wealthy, it is a complete waste of time, energy, and tranquillity. Third is sticking my hands out of the casket, I want people to know that I came empty handed into this world and likewise will go empty handed from this world. So, therefore he wanted to teach the rest of the world that peace is ultimate thing to win hearts not wars. In regards to this year's peace day, the theme is "End racism and build peace" Every society's institutions, social structures, and standard of living are still tainted by racism. It still serves as a major contributor to enduring inequality. And it keeps denying people their basic human rights. The connections between racism and gender inequality are undeniable, and they destabilize societies, damage democracies, and diminish the legitimacy of governments. We have observed racial discrimination at borders as wars continue to flare around the world and force people to flee. We have observed that some racial groups have been struck considerably harder than others as COVID-19 continues to strike our neighbourhood. As economies struggle, racial minorities have been the target of hate speech and acts of violence. In order to promote peace, each of us must play a part. And one important way to participate is to combat racism. We may fight to undermine the institutionalized racism in our society. All across the world, we may help movements for equality and human rights. Education and restitution for past wrongs are two ways we may advance anti-racism. A world devoid of racism and racial discrimination should be our goal. A society where empathy and compassion prevail over prejudice and hostility. A world in which we may actually take pride. Real peace requires much more than just putting down weapons, so to speak. It necessitates creating cultures in which everyone feels that they may prosper. It entails establishing a society in which everyone is treated fairly, regardless of race.

YOUR COLUMN  
Constantly expanding universe

Dear Editor:

In this era of advanced technology, research and discovery about earth and the universe has been going on for many decades. Despite this, scientists say that there is much that remains to be discovered. Meanwhile, scientists know a lot about their world, but now they have gradually become convinced of a world which is completely opposite to our world. About fourteen billion years ago there was no universe, only darkness. Suddenly a point arose. Then that point started rolling in. The explosions started inside the point itself. Then due to the mutual collision of protons inside, immense energy was created. The explosion turned into a big blast. The universe continued to be created from these great explosions. Even today, great explosions keep happening in the universe. In this way the universe is continuously expanding. This is the Big Bang theory. The universe is constantly expanding and the speed of its expansion is accelerating. All the planets and stars and galaxies are moving away from each other. This mystery has been unsolved for the last two decades as to what is it that has led to this expansion.

It continues and its pace is accelerating. Scientists are trying to understand the speed of this expansion in a number of ways, which can help them find answers to many unresolved questions such as the age, structure and expansion of the universe. Astronomers at the University of Chicago have suggested a new method for understanding the evolution of the universe called spectral sirens, in which they can understand the ancient universe through the collision of black holes. It is said about the black hole that it is a place where information also disappears, yet scientists have found many. Through these indirect methods, it has been successful in extracting such information, which can be known about the history of the universe. In a new study, two astronomers have developed a method by which pairs of colliding black holes can be used to measure the speed of the expansion of the universe. This will allow us to know from where our universe evolved, from what it was formed and where it is going. What is the rate of expansion of the universe; this remains the biggest question and the subject of debate. The new study proposes a new method of this calculation, in which the celestial vibrations produced by the collision of black holes can be measured by special detectors. When two black holes collide, they everywhere in the universe, a vibration spreads in 'Akash-Ka'. On Earth, the Laser Interferometer Gravitational Wave Observatory

in US and Vargo Observatory in Italy can capture these vibrations, which are called gravitational waves. Over the years, LEGO and Vargo have collected data on collisions of about ten black hole pairs. The information about the mass of the black hole is hidden in these waves. But due to the expansion of the universe, the properties of these waves change along the way. If scientists can measure the change in these waves so they can also find out the rate of expansion of the universe. Scientists are still engaged in the discovery of what dark matter is. It is believed that ninety-five percent of space is made up of dark matter and dark energy. Dark matter acts as an attractive force, a kind of cosmic mortar, that holds our world together. This is because dark matter interacts with gravity, yet does not reflect, absorb or emit light. Dark energy is a repulsive force, a type of anti-gravity, which slows down the expansion of the universe. It is estimated that about twenty-three percent is dark matter. Antimatter has no power at all, but dark matter is everywhere. According to scientists, dark matter and dark energy are the only link, which has tied this entire universe in an orderly manner. Dark matter is made up of substances that neither emit, absorb nor reflect light. For this reason it has not been possible to see it yet. Scientists discovered dark matter. But they could never gather correct information about it. It turned out that all the galaxy's planets, stars and constellations are stable due to the binding force of gravity. But on calculation it was found that the gravitational force is not enough to hold the galaxy. Meaning there is some other unknown thing, which is holding them. Otherwise, the gravitational force would have weakened by now and all the planets, constellations, stars would have deviated from their orbits. This thinking gave strength to the concept of dark matter. Dark matter itself gives mass to this universe. In this era of advanced technology, research and discovery about the earth and the universe has been going on for many decades. Despite this, scientists say that there is much that remains to be discovered. Meanwhile, scientists know a lot about their world, but now they have gradually become convinced of a world which is completely opposite to our world. This theory is explained in detail in the journal Annals of Physics. Researchers also say that in this world, the neutrons would be moving from the right side. To prove the point of this world, scientists are testing mass neutrons. If they succeed in this project, then it will be proved to be a thing of the other world. Scientists also do not rule out the possibility that like our world, there is a world where the wheel of time moves in reverse.

Vijay

PROGRESSING J&K  
Govt providing wings to aspiring entrepreneurs through various initiatives

Mumkin, Tejaswini, Rise Together, Parvaz, Hausla, Saath, Umeed schemes making livelihood sustainable for youth Around Rs 1840 cr disbursed among 53,299 aspiring entrepreneurs

To give wings to young generation of J&K and make them able to take entrepreneurship journey, the J&K Government with the help of banks has disbursed around Rs 1840 crore in favour of 53,299 aspiring entrepreneurs this fiscal.

The government has worked out two pronged strategy for establishing entrepreneurship ecosystem across J&K. Several investors from reputed organisations are investing here and handholding young entrepreneurs to make them job providers.

The Ministry of Home Affairs recently said that 29,806 people had been hired by the J&K administration and it was estimated that 5.2 lakh jobs have been created through self-employment programmes in the last three years across Jammu and Kashmir.

The government has introduced a variety of self-employment programmes during the last three years to aid young people in starting their businesses.

One of the J&K administration's most fruitful efforts has been the Mission Youth programme.

Under Mission Youth, opportunities are being provided to young boys and girls to become entrepreneurs through schemes like Mumkin, Tejaswini, Rise Together and Parvaz. J&K made significant strides towards making urban and rural youth financially independent through Hausla, Saath, Umeed and House Stay programmes.

As many as five lakh rural women have been empowered through Self Help Groups, thereby neutralizing the sense of insecurity and despondency.

A sustainable livelihood line in the transportation industry has been established for unemployed youth with the help of 'Mumkin' (livelihood generation) programme run by Mission Youth.

The 'Spurring Entrepreneurship Initiative' programme is built on the idea of the Youth Enterprise with Innovation (YouWiN) and Champion for an Innovation initiative, which aims to inspire young people, especially young women, to start and grow innovative businesses.

Dentists are receiving tailored financial help for opening dental clinics under sector-specific programme for dental professionals.

Under this programme, qualified youth groups receive financial support of Rs 20 lakh, which is made up of a loan from the bank for Rs 17.50 lakh or 70 percent of the project cost and an upfront subsidy component minimum of Rs 2.5 lakh or 10 percent of the project cost. Lieutenant Governor, Manoj Sinha recently said that 30 thousand government jobs have been provided to the youth in last three years with complete transparency. "Self-employment opportunities have been provided to 5.2 lakh young boys and girls under various programmes.

Under the Prime Minister's Employment Generation Program, Jammu and Kashmir has been successful in establishing 21,640 manufacturing and service units in the last financial year, thereby emerging as the best performing region in the country.

Under the programme, 1.73 lakh new job opportunities were created, which is the highest among all the states and Union territories of India," he added.