

PROGRESSING INDIA

In the field of science and technology, our India has also come in the category of many developed countries of the world from scientific and technological point of view. From bicycles to spacecraft are being made in the country. Continuous research is being done on nuclear science, metal-lurgy, space research, information technology, communication, agriculture science etc. India has established its dominance in the entire world in information technology.

Many of our companies are acquiring well-known companies abroad. India is making waves in the software business. Export trade is also increasing significantly. Foreign exchange reserves are continuously increasing.

Even in the field of security, India is no longer behind anyone. Traditional and latest weapons are being manufactured in the country. The development of tanks, radar, missiles, combat vehicles, missiles like 'Prithvi', 'Trishul', 'Agni' etc. is making the country confident about its security. We have become the nuclear power of the world.

Water is Life, Water is Food

■ DR. PARVEEN KUMAR

October 16 every year celebrated all across the globe as World Food Day this year aims to highlight the critical role of water for life and for our food systems. This year the theme 'Water is Life, Water is Food' speaks in volumes that life and livelihoods depend upon water. Water is a 'sine qua non' for human existence ad its sustained availability is of prime importance.

Before moving ahead on importance of water, let me focus on World Food Day in few lines. Long time back, an idea of a global organization to work for and to ensure food security for all was floated. However, this idea wasn't put into practice until 1905. That is when an international conference was first held in Rome, due to the efforts of US agriculturalist David Lubin. This conference resulted in the creation of an agency known as the International Institute of Agriculture which can be called as a precursor of the present Food and Agriculture Organization. After World War II the then United States President Franklin D. Roosevelt decided that an agency needed to be formed to replace the International Institute of Agriculture. He called a meeting which was held at Quebec, Canada in 1945 to discuss and advance that idea. On October 16th, 1945, the Constitution of the Food and Agriculture Organization was drafted. When the United Nations was created to replace the ineffective League of Nations on October 24th, 1945, then the Food and Agriculture Organization was placed under its powers. Since its formation, the Food and Agricultural Organization of the United Nations has been working to raise levels of nutrition, improve agricultural productivity at all levels, enhance the lives of rural populations and contribute to the growth of the world economy. It also provides assistance to countries changing their agricultural policy, to aid regions out of famine situations, to help implement appropriate technology and facilitate a neutral environment to discuss issues around food production.

At the FAO's 20th session in Rome, Italy, in November 1979 the conference called for the observance of World Food Day on October 16, 1981, and on the same date each year. The Hungarian Delegation, led by the former Hungarian Minister of Agriculture and Food Dr. Pál Romány, played an active role at the 20th Session of the FAO Conference and suggested the idea of celebrating the World Food Day worldwide. The UN General Assembly ratified this decision on December 5, 1980, and urged governments and international, national and local organizations to contribute to observing World Food Day. It has since been observed every year in more than 150 countries, raising awareness of the issues behind poverty and hunger. World Food Day has been held each year since 1981. Each year has a different theme. Every year since 1981, World Food Day has had a theme to help people focus their attention on a particular aspect of global hunger. For instance, in 1981, the theme was 'Food Comes First.' In 2023 the theme is Water is Life, Water is Food'. The theme stresses on the importance of water for food and life. Water is an essential requirement for all the food systems. We cannot imagine agriculture without adequate water.

A 2020 report of Food and Agriculture Organization (FAO) 'State of Food and Agriculture' came out with some serious concerns regarding water. It stressed on overcoming water challenges in agriculture. The report reveals that at present 3.2 billion people live in agricultural areas with high or very high water shortages or scarcity, of which 1.2 billion people live in areas with very high water constraints. From the 1.2 billion people, nearly half live in Southern Asia, and about 460 million live in Eastern and South-eastern Asia. Without immediate action, many more will be affected.

In India, as per the Central Water Commission, 85.3% of the total water consumed was for agriculture in the year 2000. This is likely to decrease to 83.3% by 2025. India does not spend any money in conserving water consumed in agriculture. Surprisingly, water conservation takes place in the industry and utility sectors, both of which consume less than 5% of the nation's water: the population increase and changing lifestyles has increased demand for water (largely for irrigation) in both urban and rural areas. India has 18% of world population, having 4% of world's fresh water, out of which 80% is used in agriculture. During the 2011 census, India entered the league of water deficient nations. A nation is considered water deficient if the per capita availability falls below 1700 cubic meters per person. The per capita water availability that fell by 15% during the first decade of this century to 1545 cubic meters per person and was expected to be below 1400 cubic meters per person the following summer. Though the rate of depletion has reduced in the last few years, we are still consuming much more than is being replenished by nature. Here lies the danger. We will be leaving a troubled legacy for the next generation unless we take quick remedial actions to reverse the trend.

Faulty agricultural practices are also responsible for the sorry state of affairs. Many other factors are also contributing for this water scarcity which includes the climate change, rising population, the water wastage, its non judicious use, socio-economic development and many others. There has been a rising demand for this precious natural resource. The anticipated impacts of climate change, such as uncertain rainfall and water availability, further exacerbate these factors. Rising incomes and urbanization are leading to increased water demand from industry, energy and services and the dietary changes also imply more demand for water-intensive foods (e.g. meat and dairy products).

CONSERVING WATER: Water is a precious resource and needs to be conserved. Ultimately the solution for overcoming the water scarcity has to come from each of us. As agriculture is the largest withdrawal of water, water use in agriculture has to be made more efficient and sustainable. The basic principle should be 'more crop, per drop'. Many water conservation practices like drip, sprinkler can be adopted more so in rainfed regions of the country where water availability is an issue. Rainwater can be harvested in farm ponds and roof tops for further use in times when water scarcity occurs. The drip and sprinkler system of irrigation avoid the conveyance losses and make the water available directly in the root zone of the plants. Flooding of fields should be avoided. Paddy requirements for water according to FAO estimates make it as one of the most water intensive crops. Techniques like System of Rice Intensification that avoid flooding rice fields should be promoted for cultivation of rice. In our own houses, micro level efforts like plugging the leakages of taps, avoiding waste of water while bathing, washing clothes and brushing the teeth; using water from kitchen to irrigate kitchen gardens, avoiding pollution of water can go a long way in ensuring that water is available to those who could not get this precious resource due to our mistakes

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WORLD TRAUMA DAY

■ DR AYUSH SRIVASTAVA, DR ABHINAV MANI & DR PARVEZ MOHI UD DIN DAR

Trauma, in all its forms, has been a significant global health concern. From accidents to violence, natural disasters to industrial mishaps, the burden of trauma is felt by individuals and societies worldwide. To raise awareness and promote trauma prevention and management, World Trauma Day is observed annually on October 17to raise awareness about the impact of traumatic injuries and the importance of prevention, treatment, and support for trauma survivors. This day is not only an opportunity to acknowledge the challenges faced by trauma victims but also a call to action for individuals, communities, and healthcare professionals to work collaboratively towards a safer and more compassionate world. In 2023, it's crucial to reflect on trauma statistics and examine the efforts taken to prevent and respond to trauma.

Trauma, whether intentional or unintentional, results in millions of deaths and disabilities globally. The World Health Organization (WHO) estimates that trauma accounts for nearly 9% of the world's total deaths. This includes road traffic accidents, falls, and injuries resulting from violence.While these numbers are alarming, they only tell part of the story. Many trauma cases, particularly in low-income and middle-income countries, go unreported. The impact of trauma, both on individuals and communities, is immeasurable. The economic cost, healthcare burden, and personal suffering that result from trauma are substantial.

India, with its rapidly growing population and diverse socio-economic conditions, faces its share of trauma-related challenges. According to data from the National Crime Records Bureau (NCRB)3,74,397 and 3,97,530 accident deaths occurred in India during the year 2020 and 2021 respectively which is alarmin.

Preventing trauma is a multifaceted challenge that requires a collaborative approach from individuals, communities, and governments alike.Additionally, public education campaigns about the risks and consequences of trauma should be widespread. Encouraging the use of safety equipment can save lives.

Road Safety Measures:

Road traffic accidents (RTAs) continue to be a major contributor to trauma cases, emphasizing the critical need for heightened road safety measures. By adopting proactive habits and adhering to safety guidelines, we can significantly reduce the incidence of accidents on our roads. Here are some key road safety measures we should follow to prevent trauma in road traffic accidents:

Buckle Up: Seat belts are our first line of defense. Ensure that all occupants of a vehicle, regardless of seating position i.e., front middle or back seat, are securely buckled up before the journey begins.

Helmet Use: For motorcycle riders and passengers, wearing helmets is non-negotiable. A properly fitted helmet greatly reduces the risk of head injuries in the event of an accident and saveslives.

Obey Traffic Signals: Adherence to traffic signals and signs is fundamental. Red means stop, yellow indicates caution and green means go. Strictly following these signals helps regulate traffic flow and prevents collisions.

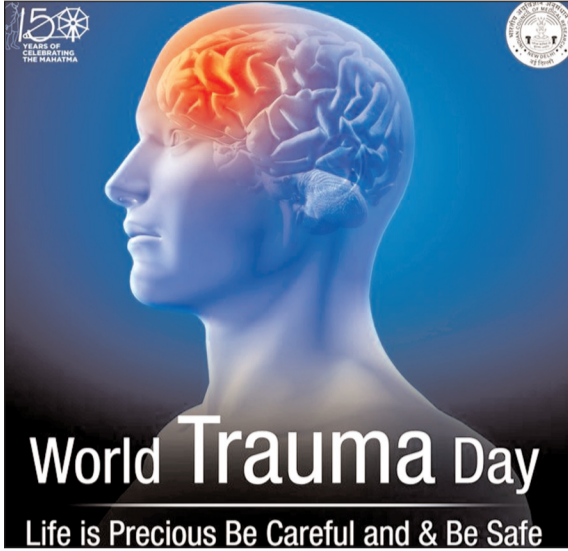
Avoid Distractions: Distracted driving, often due to mobile phone use, is a significant cause of accidents. Even use of hands-free devices for communication should be avoided. These are equally distracting during driving. Keep your focus on the road as the human brain can concentrate on one task at a time.

Maintain Safe Speeds: Speed limits are established to ensure safe driving conditions. Adhering to these limits, especially in residential areas and school zones, prevents accidents and minimizes the severity of injuries in case of a collision.

Regular Vehicle Maintenance: Ensure that your vehicle is in good working condition. Regular maintenance checks, including brakes, lights, and tires, are essential to prevent mechanical failures that could lead to accidents.

Respect Pedestrians: Pedestrians have the right of way at designated crosswalks. Exercise caution in areas with heavy foot traffic, and always yield to pedestrians.

Stay Sober: Driving under the influence of alcohol or drugs significantly impairs judgment and reaction time and leads to accidents.



Weather Adaptation: Adjust your driving behavior according to weather conditions. Slowdown in rain, fog, or snow, and maintain a safe following distance.

Education and Awareness: Continuously educate yourself on safe driving practices and encourage others to do the same. Participate in community road safety initiatives to raise awareness and promote responsible driving.

Collective adherence to these road safety measures is crucial in reducing the number of road traffic accidents and the resulting trauma. By cultivating a culture of responsible driving, we contribute to safer roads for ourselves and everyone sharing the journey. Remember, safety starts with each of us-let's drive with care and consideration for the well-being of all.

Fall Prevention:

Falls, though often overlooked, are a significant source of trauma, especially among the elderly. Taking proactive steps to prevent falls not only ensures personal safety but also contributes to a healthier community. Here are some essential tips to help prevent falls. Conduct a thorough assessment of your living space. Remove tripping hazards such as loose rugs and clutter. Ensure good lighting in all areas, especially staircases and hallways.Wear shoes with non-slip soles that provide good support. Avoid walking in socks or shoes with worn-out treads, as these can increase the risk of slipping.Rooftops should always be kept protected.

Poor vision is also a major contributor to falls. Have your eyes checked regularly and update your eyeglass prescription if needed. Clear vision is crucial for navigating your surroundings safely.Some medications can cause dizziness or affect balance. Consult with your healthcare provider about the potential side effects of your medications. If necessary, adjustments can be made to reduce the risk of falls.

Occupational Safety:

Occupational trauma is another major cause of trauma in individuals who might be the sole bread earners for their families. As we observe World Trauma Day, it is essential to underscore the significance of implementing robust safety measures in occupational settings.Before the work begins, conduct a thorough risk assessment. Identify potential hazards and take proactive steps to mitigate risks. This may involve implementing safety protocols, providing protective equipment, and ensuring that employees are adequately trained to handle specific tasks safely.

Equip employees with the knowledge and skills necessary to navigate their work environment safely. Regular training sessions on safety procedures, proper equipment usage, and emergency protocols contribute to a culture of awareness and responsibility.Design workspaces with ergonomics in mind. Properly arranged workstations and tools can significantly reduce the risk of musculoskeletal injuries. Encourage breaks and stretching exercises to alleviate strain associated with prolonged periods of sitting or repetitive tasks.

Establish a transparent and accessible system for reporting hazards or unsafe conditions. Encourage employees to communicate potential risks without fear of reprisal, fostering a culture of continuous improvement in occupational safety.Ensure that machinery and equipment are regularly inspected and well-maintained. Malfunctioning equipment poses a significant risk, and preventive maintenance can mitigate the likelihood of accidents.Stay abreast of and comply with occupational safety regulations relevant to your industry. These regulations are designed to set a baseline for safety standards, and adherence ensures a legal and ethical commitment to employee well-being.

Conclusion: On this World Trauma Day, let us unite in our commitment to preventing trauma and supporting those affected. By implementing preventive measures, fostering a culture of safety, and creating a network of support, we can collectively reduce the burden of trauma on individuals and communities. Remember, each one of us has the power to make a difference-a small act of prevention or support can have a profound impact on someone's life. Together, let us build a world where trauma is minimized, and the resilience of the human spirit prevails.

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Rural Entrepreneurship: Challenges and Opportunities

■ DR. BANARSI LAL

Entrepreneurship development is important for a country's progress as it augments economic and employment growth. Govt. is launching many schemes to start entrepreneurship in the rural areas. Setting up enterprise depends on one's capacity, which differs from person to person. Rural enterprises are the business entities which by means of effective use of local resources, promote revenue generation and act as the agents of social change at the grass root level. These entities not only play the significant role in the holistic development of the rural economy but also contribute to the economy of our nation. Agriculture forms the backbone of the Indian economy. In India about 70 per cent of population seeks employment in agricultural sector.Majority of the farmers in India are small, marginal and agricultural labourers and a number of them are either unemployed or underemployed. In India, total food grain production in 2022-23 was 330.50 million tonnes. India is the second largest producer of fruits and vegetables in the world after China and first in milk production in the world. India is also having largest cattle population in the world. These agricultural products are partially utilized by the food-processing industries. For example in India only two per cent of fruits and vegetables are processed as compared to 70 per cent in Brazil,30 per cent in Thailand,78 per cent in Philippines and 80 per cent in Malaysia. We lack proper storage and processing facilities due to which we have annual post-harvest fruit and vegetable losses of more than Rs. 2 lakh crores. We can reduce these losses by improving the transport facilities, storage and processing of agricultural products. If we look at the contribution of this sector to the total Gross Domestic Product (18 per cent), this percentage dependence on agriculture seems to be high and indicates to the intensity of disguised unemployment and under-employment in this sector. The employment opportunities in this sector have been declined due to the application of labour saving technology declined public investment and lifting of quantitative restrictions on imports of agricultural products.Also the urban organised sector does not appear to be promising in absorbing growing workforce. This is evident from decline in the absolute number of jobs in public sector enterprises due to retrenchment and disinvestment policy.Although,urban informal sector is growing very fast and a large numbers of youths are absorbed by it but the exodus of rural workers in urban areas is creating a serious problem, to the carrying capacity of urban sector:Under these circumstances, the viable option for providing gainful employment to the growing rural workforce and to lessen the burden of manpower in

agriculture seems to be in generating more employment in the rural-non farm sector.

During the planning period, rural development strategy has shifted from growth oriented to welfare oriented and further to empowerment oriented. Our development strategy was based on trickle-down theory up to the Fourth Plan in which emphasis was laid on acceleration of growth on the presumption that its benefits would percolate down to the lowest strata of society. This top down approach could not prove effective in alleviating rural poverty. From the Fifth Plan, Government of India tilted its development strategy towards the welfare of downtrodden and underprivileged sections of rural society. Since then, a large number of self-employment programmes have been launched by the Government of India.One of the drawbacks of these programmes was that the group entrepreneurship was not followed in them. Development of Women and Children in Rural Areas (DWACRA) was the only programme which was based on the group approach, covering 10-15 poor rural women in agroup.The major objective of DWACRA was to develop the income generating skills among the rural women.Training of Rural Youths for Self Employment (TRYSEM) was another self-employment programme. The major objective of which was to develop technical skills among rural youths. In 1999, Government of India started a new self-employment programme called as Swarnjayanti Gram Swarozgar Yojana (SGSY), which is based on group approach. Major objective of this programme is to establish a large number of rural enterprises. This is a holistic programme covering all aspects of self-employment, viz., organisation of the rural poor in to the Self-Help Groups (SHGs). It is credit-cum-subsidy programme. It involves the banks in the planning, preparation of projects; identification of clusters, infrastructure planning, capacity building and choice activity of SHGs.This programme also involves market intelligence, development of markets, consultancy services and institutional arrangements for marketing of the goods. Review of all these self-employment schemes indicates that the policy focus has been largely on poverty alleviation rather than on creation of income and wealth on sustainable basis through investment in productive employment generating activities.Beneficiaries of most of these schemes is poor and illiterate who lack necessary skills to run the activities. A big or medium enterprise can easily hire the workers with different skills. It is not possible in micro enterprise to have access to all these skills and due to lack of necessary skills, many of them could not survive .Thus, development of rural industries under group entrepreneurship can be a good option in this

regard. Expansion of rural industrialisation can play a big role in abating distress migration from rural areas and stopping drain, thus reducing the pressure on urban civic services and boosting rural income and employment. On the basis of demand and supply parameters, food industry in India can play a vital role in increasing rural income and employment through agricultural commercialisation, diversification and value addition. For promoting group entrepreneurship among the rural youths, there is need to identify the unemployed educated youths and organise them in groups for jointly taking up some enterprising projects. Each group would have 5-10 rural youths trained in different skills. Such type of groups may also be involved with Swarnjayanti Swarozgar Yojana by involving the beneficiaries of the programme. Agro and non-agro based rural small scale industriescan be established by involving the unemployed youths. These industries should be based on the locally available resources. The funds of these industries would be mobilised through bank loans and subsidy to the target groups. Gram Panchayats should be entrusted the responsibility of identifying the different type of unemployed workers willing to join the group. It has been observed that various small scale enterprises could not survive due to lack of market support. Their growth or decline depends on markets, access to technology, credit and skills. There are need to develop a suitable market mechanism for the products of these enterprises. The marketing structure of KVIC and other government outlets can be utilized. There is need to build brand equity for their products. Cooperative marketing institutions can also be used. Efforts from NABARD, other commercial banks, rural local government and Non-Governmental Organisations (NGOs) promote group entrepreneurship. Transfer of cost-effective technology and its constant up gradation is necessary for raising productivity, improving product quantity, competitiveness and increasing profitability of the enterprises. The fast growing urban informal sector is putting pressure on the carrying capacity of urban sector due to influx of workforce from rural areas. Development of group entrepreneurship among the rural youths will be a good alternative strategy for rural industrialisation. In order to create conducive environment for the promotion of group entrepreneurship in the rural areas, various interventions such as management of required inputs, finance, market mechanism, revitalizing the existing training infrastructure and use of modern technologies are essential.

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Transcending the three Gunas this Navaratri

■ GURUDEV SRI SRI RAVI SHANKAR

The nine days of Navratri are a wonderful opportunity to rejoice and transcend the three primordial qualities that make up the universe. Though our life is governed by the three gunas, we never take out the time to recognize and reflect on them.

The three primordial gunas are considered as part of Shakti or the feminine force in this creation. When we worship the Mother Divine during Navaratri, we harmonize these three gunas and raise sattva in the atmosphere. The first three days of Navaratri are attributed to tamo guna or the dark, dense, heavy aspect of the existence, the following three days are related to rajo guna that represents activity or restlessness and the last three days pertain to sattva guna or purity. Our consciousness moves through the tamo and rajo gunas and blossoms in the sattva guna in the last three days. We take this journey during these nine days and nights through fasting, prayer, silence and meditation to get back to our true source; which is love, joy and peace. Whenever sattva dominates in life, victory is sure to follow. The essence of this knowledge is honored by celebrating the tenth day as Vijaydashmi.

The three gunas are transcended by the worship of the three forms of mother divine during the nine days. Goddess Durga is invoked first; praying to whom removes impurities from the mind. This way, we begin with winning over the tendencies of

the mind like cravings, aversions, pride, and greed. Once we have subdued these negative tendencies and patterns, we move ahead on the spiritual path to nurture and strengthen your positive qualities. Goddess Lakshmi is prayed to, for nurturing these noble values and qualities in our hearts and minds. And in the last three days, Goddess Saraswati in her various forms is propitiated for gaining the highest knowledge of the Self, when sattva remains high.

Offerings as a symbol of gratitude

We offer flowers and fruit to Mother Divine during these auspicious days. But the flower truly represents human blossoming, who we are - so full, charming and so light - so beautiful. Fruits symbolize completeness or totality. In the life cycle of a plant, fruits denote completeness, or fullness, just how we feel when we offer the symbolic fruit as prasad to Mother Divine God with all the gratitude. We also light lamps. In the Indian tradition, we use tall brass lamps with a swan carving on the top, which has a beautiful meaning. In Sanskrit verses, a swan is said to be blessed with 'Neerakshiravivika' meaning it can differentiate between milk and water even though both may be mixed.

The beauty of yagyas

Ancient Sanskrit mantras chanted during yagyas performed during these nine days, have a deeply purifying and uplifting impact on the consciousness. More than the words, it is about

becoming one with the vibrations. Although we may not entirely understand the meaning of all the verses chanted during the homas or ceremonies which are performed during Navaratri, we should simply soak in the meditative, positive and auspicious vibrations created through the chants in the environment. Yagnas, when performed with utmost purity and devotion, bestow all the beings with freedom from all the misery, sorrow, and pain in the world and brings peace, strength, prosperity, success and faith - which by itself, is the best blessing.

The ninth day is a day to honor everything that we have, from all that is grand to what is seemingly insignificant, through homa offerings. The entire creation comes alive and we begin to recognize the impulse of Mother Divine in everything just as children see life in everything. The Mother Divine or the pure consciousness pervades all the forms, showering the creation with her blessings.

Recognizing the one divinity in every form and every name is the celebration of Navratri. The tenth day is 'Vijaya Dashmi' the 'victory day'. It is only after we have honored something that we can gain victory over it. It is usually celebrated as victory of good over evil but that is a limited way of looking at it. From the Vedantic viewpoint, victory is of the absolute reality over the seeming duality. The great sage Ashtavakra says- 'it is merely the poor wave that tries to keep its identity separate from the ocean, but to no avail.'