#### REVIVING WATER BODIES

he union territory of Jammu and Kashmir, blessed with pristine rivers, lakes, and wetlands, has long been celebrated for its breathtaking natural beauty and ecological wealth. Yet, behind this picturesque landscape lies a silent environmental crisis-its once-thriving water bodies are shrinking, polluted, and fighting for survival. From the Dal and Wular lakes in Kashmir to the once-vibrant ponds and springs across Jammu, the deterioration of these ecosystems calls for urgent and coordinated revival efforts.

For decades, rapid urbanisation, encroachment, unchecked pollution, and mismanaged tourism have placed tremendous pressure on J&K's water systems. Traditional water bodies that once supported local communities, agriculture, and biodiversity are now choked with silt, plastic waste, sewage inflows, and invasive weeds. The disappearance of natural springs-locally known as nag-and village ponds has also disrupted groundwater recharge, leading to water scarcity in regions that historically never faced such shortages. This decline is not merely an environmental challenge; it threatens livelihoods, public health, and cultural identity.

Reviving these water bodies requires more than cosmetic cleaning drives-it demands a comprehensive, science-backed and community-driven approach. The administration has indeed launched several initiatives in recent years, focusing on lake conservation, wetland restoration, and anti-encroachment measures. However, government intervention alone cannot shoulder the entire responsibility. What is needed is a synergy between policy, science, and public participation.

Firstly, strict regulation of encroachments is essential. Many lakes and ponds have been gradually squeezed by illegal constructions, often under the guise of development. Without clear demarcation and enforcement, revival efforts will remain futile. Secondly, sewage treatment must be strengthened. Dumping untreated waste into rivers and lakes has been one of the most harmful practices, and establishing decentralised sewage treatment plants can significantly reduce pollution load.

Equally crucial is community stewardship. Historically, local communities treated water bodies as sacred assets, and their management was interwoven with cultural practices. Reviving this sense of ownership can transform conservation efforts. School programmes, youth-led cleanliness campaigns, and village-level water committees can ensure both awareness and accountability. When people recognise that protecting water bodies directly benefits their health, economy, and environment, behavioural change naturally follows.

The adoption of modern technologies, such as real-time water quality monitoring, drone mapping to identify encroachments, and bio-remediation techniques, can accelerate restoration. Wetland tourism-if developed responsibly-can create employment while preserving ecological balance. Encouraging naturefriendly livelihoods like fishing, floriculture, and eco-tourism around restored water bodies can give local communities an economic stake in conservation.

### Balancing Environmental Protection and Sustainable Development

The term environment has been drived from the term 'environ' which means to surround. Thus, etymologically environment means surrounding conditions, circumstances affecting people's life. In present era of globalization and technological innovations, it is paramount to prioritize the well being of our society, economy, culture and environment. Environment protection and its preservation is a matter of concern for nations across the globe. Human activities are correlated with the nature and human beings cannot remain aloof after causing damage to the environment. Every year about 7 million people die prematurely due to air pollution. There is dire need to explore renewable energy and green technologies and improve air quality in cities and regions across the globe. It is estimated that about 92 per cent of the people do not breathe clean air across the global. Air pollution badly affects the global economy and ground level ozone pollution is expected to reduce staple crop yields by 26 per cent by 2030. This particular day is dedicated to spread the awareness and message among the people to save the environment and planet Earth. In 1972, the United Nations Conference on the human environment was held from 5th June to 16th June. After that, every year 5th of June is celebrated as the World Environment Day. Today, we have 7 continents on planet earth. Every human being has only one dream which is to live better, to eat better and to consume better. But majority of them never care for the environment and planet Earth. Now we are more than 7 billion but we have only one planet to live and survive. We have limited food, limited place and limited shelters. If we keep on using natural resources as we are doing every day, a day will come when our own grand children shall be forced to live homeless with full of hunger. So it's better to consume the natural resources with care and responsibility. So, we should stop the wastage natural resources and use them according to our need not on our greed. Each of us knows the importance of nature. It consists of all the living beings on the earth, which are mutually interdependent on each other. But due to the

many species are becoming extinct and the global climate is also changing at a very rapid rate. The changing climate is inversely affecting our health and also going to give a long term effect on our future generations. We know that millions of people on the Earth depend on forest for their livelihood. Every living being is dependent on plants and trees Only the plants and trees can make our food. But, we people are degrading the forests in a rapid rate.

Development is crucial for the growth of a country but it's more vital to intent on sustainable development which can make our people live peacefully. The relationship between development and environment is well established. It has been estimated that by 2030 food production will need to double and industrial output and energy use will increase three times in the world and five times in the developing nations. This growth can bring the risk of appalling environmental damage. It can also bring with it better environment protection, clean air, water and eradication of poverty. Environment is one of the most important pillars of sustainable development. Environment protection is an essential part of development. Without adequate environment protection, development is useless. Environmental damage affects the present and future human welfare. It affects human health and reduces agricultural productivity. Some problems are associated with the lack of economic development, inadequate sanitation, clean water and air pollution from biomass burning. Illegal cutting of forests is a matter of great concern. The lack of appropriate technology for maximum utilization of the raw materials, poor silvicultural practices, low recovery, low budgetary provision for forest operations have all hampered effective management. As a result fuel wood, timber, pole wood and carving wood are being exploited at unsustainable levels. Ecological degradation of wetlands together with pollution has resulted in the loss of flora and fauna. The high amount of fertilizers and other inputs required in agriculture for increasing the productivity has led to the degradation of the environment. Despite decades of warning ple are still being exposed to toxic pollutants. Pollution from agricultural land caused by leaching of nitrogen fertilizers has been detected in the ground water in many areas. In Harayana, for example, some well water is reported to have nitrate concentration ranging from 114 mg. / litre to 1800 mg. /litre far above the national standard 45 mg. /litre. Government should monitor and implement policies to reduce pollution and environment degradation and to safeguard the natural system that supports renewable resources. Action should be taken for achieving a sustainable future. The common property resources which are mostly natural resources must be protected for the overall growth of the nation. Such efforts for preserving the natural resources not only lead to optimum utilization of natural resources but also generate more employment for the people.

Sustainable development is focused on any kind of betterment that should not harm the environment so that the well being of future generations is guaranteed and the harmonious relationship environment and development is sustained. Natural resources are the wealth of any nation. Presently they are facing environmental hazards due to various reasons. The process of sustainable development tries to build social and economic progress satisfying the needs and values of the social groups without foreclosing future options. A sustainable development process is of dire need. Environmental aspect assumes great significance in growing deforestation, soil erosion, land degradation, water pollution, biodiversity loss and the like which continue to worsen economic development of India. Environmental quality is an integral part of development. Without environmental ethics development is simply undermined. Rio-Earth Summit (1992) highlights the view that socio-economic development and environment protection are interdependent and mutually reinforcing processes. Recently, the healthy rural environment has encountered divergent environmental hazards as an addition to their existing issues of social and economic hardships. Such threats badly affect the local community which is the impetus

as cultivation in marginal lands. It constitutes a growing class of environment

Sustainable development is felt as a necessary intervention to fight against poverty, unemployment and other complicated problems. Sustainable rural development can promote growth and equity simultaneously and also promote the development of democratic process at the grass root level by creating awareness on social forestry, soil conservation, population control, protection of tanks, rural energy management, biodiversity, popularization of eco-friendly activities etc. Sustainable development on the one hand benefits local people and safeguards the flora and fauna of a particular region on the other. Environmental issues cannot be solved unless the local people take part in it. Their participation will help in promoting wildlife conservation, afforestation and also in employment generation. Local people skill and manpower are needed to deal with the aftermath of environmental disasters .Afforestation and arresting of deforestation can be carried with the help of local people. Protection of environment is mainly in the hands of the people. It has been studied that people's participation is the most determining factor of biodiversity conservation. The participatory approach to environmental protection can be strengthened through the decentralized planning which provides opportunity for the different communities to effectively participate in the environmental activities. All the stakeholders should understand the present environmental crisis and find out suitable solutions to tackle this awful situation. The emphasis should be given on handling and defending the natural resource cycles, habitats, social conditions ,materials and relationships that help in functioning of the ecosystem for human welfare. Environmental degradation and pollution in various forms are affecting human life in the present times. There is need to work jointly by all the nations to mitigate the problems of industrialization and over exploitation of nat-

ural resources. (The writer is Chief Scientist & Head of KVK Reasi, SKUAST-J)

# Epilepsy: Myths vs Reality

**■ PUPU JI KOUL** ational Epilepsy Day, observed every year on 17 November, serves as an important reminder that neurological disorders still carry deep social stigma and misunderstanding, even though medical science has made remarkable advancements in diagnosis and treatment. Epilepsy, one of the most prevalent neurological conditions in the world, affects millions of people across all age groups, yet myths and misconceptions continue to overshadow facts. This day encourages society to reflect upon its attitudes, broaden its knowledge, and replace fear with awareness. Epilepsy is not a curse, not a mental disease, and certainly not a sign of instability. It is a medical condition arising from sudden and abnormal electrical activity in the brain, and with timely medication, lifestyle care, and social support, most individuals with epilepsy can lead fully productive dignified, and independent lives. Despite the steady progress of medical research, epilepsy continues to be surrounded by outdated beliefs, especially in developing societies. Many people still associate seizures with the supernatural or assume that the condition is hereditary and untreatable. Such incorrect

assumptions often discourage families from seeking proper medical help. National Epilepsy Day aims to break these damaging perceptions by promoting scientific explanations. A seizure may manifest in various forms-from brief moments of staring blankly or sudden muscle stiffness to violent convulsions-but each type has a medical basis and can be managed effectively with clinical guidance. Neurologists emphasise that early diagnosis, regular medication, and avoidance of triggers such as sleep deprivation, stress, or alcohol can significantly reduce the frequency of seizures. The day reminds people that epilepsy is manageable, and even curable in many cases, if the right steps are taken early. An equally important aspect of National Epilepsy Day is the emphasis on empathy and social acceptance. Individuals living with epilepsy often face discrimination in education. employment, and even personal relation ships. Many hide their condition out of fear of being judged or excluded. This silence deepens their psychological burden and can lead to depression, anxiety, and loneliness. True awareness means not only understanding the medical realities of epilepsy but also cultivating an atmosphere where affected individuals feel respected, supported, and integrated rather than isolated. Schools and workplaces need to be equipped with basic knowledge of first-aid for seizures and adopt policies that treat epilepsy like any other health condition, without bias. Simple actions such as ensuring a safe environment during a seizure, keeping harmful objects away, and allowing the person to recover without panic can make a significant difference.

The role of families cannot be overstated. Parents, siblings, and caregivers often feel overwhelmed when a loved one is diagnosed with epilepsy, but their reassurance and consistent support play

a transformative role in recovery. Emotional stability, encouragement, and a calm response during seizures help the patient feel secure and confident. At the same time, families must resist outdated advice and rely on medical professionals for treatment decigiong Modern therapies include anticon vulsant medications, lifestyle adjustments, and in some cases, surgery or nerve stimulation procedures-all backed by years of research. The increasing availability of advanced diagnostic tools such as MRI, EEG, and neuroimaging has further improved treatment outcomes. National Epilepsy Day encourages families to embrace scientific understanding and work towards an informed support system. A crucial challenge in dealing with epilepsy is the lack of public awareness about first-aid responses during a seizure. People often panic or resort to harmful practices such as forcing objects into the person's mouth, sprinkling water, or holding them down forcibly. These actions can cause injury and complications. The correct approach is straightforward: stay calm; ensure the person is safe by moving away sharp objects; turn them gently to one side to help breathing; place something soft under their head; and allow the seizure to pass naturally. Most seizures last only a minute or two. After it stops, the person should be given time to regain full awareness. Medical help should be sought if the seizure lasts longer than five minutes or repeats without recovery. Disseminating such practical, life-saving knowledge is one of the primary objectives of National Epilepsy Day.

The observance of this day also highlights the remarkable achievements of organisations such as the Epilepsy Foundation of India, neurologists, caregivers, and patient advocacy groups who work tirelessly to improve awareness.

They conduct workshops, free medical camps, public lectures, and school sessions to educate communities. Their efforts contribute to reducing stigma and empowering patients to manage their condition confidently. Media campaigns, social media initiatives, and community outreach programmes conducted on this day spread valuable information to a wider audience and inspire societal change. The movement towards understanding epilepsy is gaining strength, but much work remains to be done to eliminate prejudice completely. Another important theme associated with National Epilepsy Day is the encouragement of research and innovation. Scientists across the world continue to explore the underlying causes of epilepsy, including genetic factors, infections, brain injuries, developmental disorders, and metabolic issues. Each discovery helps improve treatment strateenhances the quality of life for patients. Newer medications with fewer side effects, advanced surgical techniques, and personalised treatment plans represent promising steps forward. Increased investment in research, along with stronger government policies supporting neurological health, can accelerate progress. Public

awareness days like this reinforce the need for continuous scientific inquiry and greater healthcare access.

Epilepsy should not define a person's potential. Countless individuals with epilepsy excel in academics, professions, sports, arts, and public life. They contribute to society with the same passion and capability as anyone else. What they need is equal opportunity and an environment free from discrimination. National Epilepsy Day seeks to build this environment by encouraging understanding, compassion, and scientific thinking. The journey toward eliminating stigma may be long, but collective awareness can transform the lives of those who silently struggle with this condition. By observing this day with sincerity, society acknowledges the importance of neurological health and the dignity of every individual affected by epilepsy It reminds us that a comp community is one where misinformation is replaced by knowledge, fear is replaced by empathy, and silence is replaced by open discussion. Awareness is the first step toward empowerment, and empowerment is the path to a healthier, more inclusive

# Relevance of Vocational degrees and life skills in J&K

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internationally vocational education has gained more importance considering the lack of manpower in skill areas. All universities in France, Germany, UK, USA, Japan and China have started investing in this

area seriously. Vocational stream in India has always been considered secondary as most of the students opt for the academic streams in order to pursue their dream jobs in medicine, engineering, agriculture etc. At this juncture with the advent of NEP 2020, it was decided to embed the skill component that has been the forte of the vocational stream into the main stream to identify the talent who can be excellent skilled workers. In school and higher education, distinct importance was given to vocational education. It can be seen that the school curriculum was separated from the life skills including vocational education and there was a disconnect in terms of skilling and knowledge. NEP stipulates that in addition to these, aptitude be also included so that there are holistic education and a student who wants to drop and pursue a skilloriented job can leave after acquiring the skill. NEP focuses on multidisciplinary and a holistic education across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world in order to ensure the unity and integrity of all knowledge. NEP in schools are as per, Early Childhood Care and Education (ECCE): National Curricular and Pedagogical Framework for Early Childhood Care and Education (NCPFECCE) for children up to age of 8. Foundational Literacy and Numeracy (FLN): Digital Infrastructure for Knowledge Sharing (DIKSHA) - a **EDUCATION** TALENTS

national platform for school education providing digital learning resources in 133 Indian languages. New Pedagogical & Curricular Structure: 5+3+3+4 design and National Curricular Framework for School Education (NCFSE) by NCERT.

Life skills such as communication, co-operation, teamwork and resilience needs to be imparted to the current generation of students so that they understand how to face challenges in life and move ahead and do not focus only academics. The National Skills Qualifications Framework (NSQF) is a competency-based framework that organizes all qualifications according to a series of levels of knowledge, skills and aptitude. These levels, graded from one to ten, are defined in terms of learning outcomes which the learner must possess regardless of whether they are obtained through formal, non-formal or informal learning. At present more than 100 countries have or are in the process of developing national qualification frameworks. NSQF is piloted at the National Skill Development Agency (NSDA) and is being implemented through the National Skills Qualifications Committee (NSQC) which comprises of all key stakeholders in the national level. The National Education Policy (NEP) 2020 stipulates that a National Higher Education Qualification Framework (NHEQF) will be formulated in sync with NSQF so as to ease the integration of vocational education into higher education, pre-

scribe the facilitative norms for issues such as credit transfer, equivalence, etc. The intention is to elevate all Higher Educational institutions to a common level of benchmarking to ensure that all institutions are providing quality education.

Focus areas for vocational education will be chosen based on skills gap analysis and mapping of local opportunities. The key skilling domains identified include, IT and IT enabled services, Artificial intelligence, Apparel, retailing, Banking and Financial services including that of insurance, Tourism and Hospitality, Logistics, Health care, green jobs, Education, Construction, Telecom, Beauty and Wellness and finally Persons with Disabilities skills. New areas on electric mobility, Agriculture, Media and Entertainment and Electrical and Electronics were added as the skill courses. Many states have started the courses through a separate company found for this purpose. Data science including Big Data is emerging as a major lucrative career. Students in their ninth and tenth standards need to embrace the new technologies and other areas of significance which can offer better job opportunities.

Fortuneindia.com has projected that 110 million jobs will be added in next five years significantly in the skill sectors. Around 10 million jobs need to be added annually between 2024-25 and 2029-30 for India to maintain an average gross value added (GVA) growth of 6.5% year-on-year. In comparison, an average of 8.5 million jobs were generated each year from 1999-00 to 2022-23.Between 2019-20 and 2022-23, an average of 26 million jobs were added annually due to an increase in agricultural and services jobs. The scope for transfer of credits will require the establishing of equivalence

education. This will overcome the blur between these two educations. Infact if critical mass in school education is to be reached, then both needs to be amalgamated.

Life skills need to be included along with vocational training so that overall personality and passion will be clearly defined for the students. J&K government can revisit the school education where there is a need for appointment of next generation teachers who have niche qualifications (10%) so that the skills can be imparted to the students even in far flung areas of Jammu region. The NEP 2020 recommends the use of digital resources such as e-books, e-journals, and other online learning materials to supplement traditional classroom teaching. This will enable students to access high-quality learning resources and engage in self-paced learning. The blended mode in terms of theory and practical can help students to embrace the avocation that can be a boon to J&K. With over 10,000 Atal Tinkering Labs established nationwide, engaging over 1.1 crore students, the initiative has transformed the educational landscape. The labs emphasize inclusivity, with over 60% in government schools and 96% in co-educational or girls' institutions, ensuring widespread access to STEM innovation opportunities. J&K has been able to introduce smart class rooms in far flung areas also. Nodal schools in J&K can be identified for ATLs and bolster them for the benefit of all students in the nodal region. "Identify the students at the young and formative ages, make them part of skilling, the future of the country will be bright and soon it will grow into Viksit Bharat even before 2047.

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