

BLOSSOMING PRIDE

In a remarkable stride toward beautification and ecological awareness, the Valley has witnessed the inauguration of its first Chrysanthemum Theme Garden, marking a significant addition to its cultural and horticultural landscape. Nestled amidst scenic surroundings, this garden is not just a visual delight but a symbol of the Valley's commitment to promoting environmental sustainability, tourism, and community engagement.

Chrysanthemums, often regarded as the "queen of autumn flowers," are celebrated for their vibrant hues, intricate patterns, and symbolic significance across cultures. The garden, designed meticulously to showcase a wide variety of chrysanthemums, provides visitors with an immersive experience of nature's artistry. From the delicate shades of cream and yellow to fiery reds and purples, each bloom tells a story of horticultural mastery and careful cultivation. This garden is more than an aesthetic treat-it is an educational hub where students, botanists, and enthusiasts can learn about plant diversity, seasonal blooms, and the importance of sustainable gardening practices.

The creation of a theme garden dedicated to chrysanthemums reflects an understanding of the broader social, economic, and environmental benefits of such initiatives. Horticulture and floriculture have long been avenues for local employment, ecotourism, and cultural celebration. By investing in this garden, authorities are not only providing a recreational space for families and tourists but also fostering a sense of pride and ownership among the local community. Garden walks, photography sessions, and flower festivals centered around chrysanthemums are expected to attract visitors from across the region, boosting tourism and supporting local businesses.

Moreover, this garden promotes environmental awareness and the principles of sustainable living. By cultivating a wide array of plants, it contributes to air purification, supports pollinators such as bees and butterflies, and enhances the ecological balance of the area. Educational programs organized within the garden can instill a love for nature among children and adults alike, encouraging responsible practices like composting, water conservation, and seasonal planting. In an era where urbanization and climate change threaten green spaces, the Chrysanthemum Theme Garden stands as a reminder that beauty and sustainability can coexist harmoniously.

The garden also serves as a platform for cultural expression. Festivals and flower shows organized here will celebrate the artistic potential of chrysanthemums in floral arrangements, rangoli, and eco-friendly décor. Such events can strengthen community bonds, provide inspiration to local artists, and showcase the Valley as a destination that values creativity, tradition, and natural beauty. This garden invites residents and visitors alike to pause, appreciate the fleeting beauty of chrysanthemums, and reflect on the importance of preserving and nurturing our natural surroundings.

Women's Empowerment for Rural Revitalization

■ DR. BANARSI LAL

A woman is the nucleus of the family, particularly in rural India. Empowerment of rural women has emerged as an important issue in recent years. Rural women empowerment is essential for achieving the economic growth and sustainable development in India. Empowering rural women improves crop productivity, fosters entrepreneurship and drives social change. Rural women play a crucial role in agriculture, contributing to food security, community welfare and poverty reduction. Women involvement in various sectors from business to agriculture, drives entrepreneurship and improves overall production. They also improve health care by promoting maternal and child health. In recent years India has seen a notable rise in rural women empowerment through vocational trainings and Self Help Groups (SHGs). Rural women's empowerment serves as a powerful catalyst for economic transformation helping families to break persistent cycles of poverty. Women empowerment in rural areas enables meaningful participation in governance structures like Panchayats. Women constitute around half of the world's population but in fact they are the largest excluded category in all aspects of life. They have only 1/10th of the global income. Around 70 per cent of women are still living below the poverty line. They constitute almost invariably a small minority of those holding elected office. The data reveals that they were around 10 per cent of the world's parliamentarians in 1980 which rose to 14.8 per cent in 1988, came down to 12.7 per cent in 1997 and 19.5 per cent in 2011 and 26.9 per cent in 2024. The women around the world are striving for gender equality. Women specially in the rural areas are subjected to gender oppression and gender discrimination. The year 2001 was observed as the "Year of Women Empowerment" in India. Poverty, illiteracy, unemployment, ill-health etc. are the major problems in our country from the dawn of independence. These factors are impeding the socio-economic development of

our country. Women are mostly affected by these socio-economic factors. It has been observed that ill-health, unemployment and illiteracy rates are higher among the women as compared to men in our country. It has also been observed that women-headed households suffer more from the poverty as compared to men-headed household. Between 2001 and 2009 the poverty rates for women were double than that of men. They still face injustice from birth to death and discrimination among them is still very common. Every year; three million women die due to gender based violence.

Poverty is the greatest hurdle in the path of development. According to World Bank in 2011, 32.7% per cent of the Indian people fall below the poverty line. The recent observations by the Indian government estimated that around 38% of the Indian population is poor. India still has the world's largest number of poor people in the world. The incidence of poverty customarily is more in rural areas as compared to the urban areas and also the poverty in SC and ST households is more as compared to general castes. The Human Development Report has noted that gender equality is essential for empowering women and eradicating the poverty from the society. From time to time the Indian government has been emphasizing on empowerment of women. The only motive behind these endeavours is to bring them into the main stream of development. Different policies, programmes and plans are laid to raise the economic status of women. Article 15 of the constitution prohibits any discrimination on grounds of sex while the directive principles of state policy urges that states shall direct its policy for securing an adequate means of livelihood for women and securing equal pay for men and women. In many five years plans, emphasis was given on women empowerment. It has been envisaged to organise women into self help groups and thus empower them to equip with skills in different trades to make them economically independent and to increase access to credit by setting up development bank for women. It has also been envisaged

that the women programmes and policies need to be redesigned. It has also been designed to provide marketing channels for them. The various programmes like Indira Mahila Yojana, Development of Women and Children in Rural Areas, Mahila Samridhi Yojana, Rashtriya Mahila Kosh etc. have been launched by the Indian government from time to time.

Empowering women is not merely a social goal but an economic imperative that contributes to the overall development of communities. Prevalence of patriarchal norms, stereotyped gender biased and preference for son's right to inherit parent's property have deprived girl children from their right to property. In general, the son enjoys the inheritance father's property. Women cannot claim equality with men unless she has the same right as men hold and inherit. Ironically, the land reforms measures undertaken by different state governments are also silent about the women's right to property. In present era, growing modernization has escalated social aspirations and family tension, resulting in growing single women and women-headed households in the form of divorce, deserted and separated. The reports indicate that 16.23 million of women headed households are existing in India of which 72 per cent are residing in rural areas. Therefore empowering the rural headed households would enable them to fight against the income and poverty. The sweets of women welfare benefits are mostly enjoyed by the highly literate women and those who belong to upper strata of urban society. Women specially the rural women are deployed for the unpaid activities. Only around 15 per cent women are working in the organised sectors. Women employment opportunities are characterised with seasonality, unskilled assignments, discrimination in wage etc. in unorganised sectors. In the arid and semi-arid areas, the women specially belonging to Scheduled Caste, Scheduled Tribes and impoverished households work hard in order to mitigate hunger and poverty. The data reveals that 43 per cent of working women constitute almost half of total earnings of their families

and 18 per cent families entirely dependent on their earnings.

Women accessibility to savings and credit facilities improves their gender economic status. Women accessibility to saving and credits from banking and non-banking sectors is low particularly for the rural women. The empowerment of women largely confines to the few literate and employed urban women and the rural women remain beyond the reach of empowerment. Even it has been observed that the bank officials hesitate to sanction loan to the rural women thinking them to be too poor because the ownership of assets usually rested with men. Women are meagerly represented in the business because they lack of savings, credits and investment facilities. The Self Help Groups formulation is really a stepping stone for the economic empowerment of rural women. These types of schemes really enable the rural women for the small saving and help them to carry out small investments in income generation activities at the rural level. The women Sarpanches, Panches and village level workers of ICDS can further help for strengthening these types of schemes. Credibility among the women, difficulty in regular deposition of money, uncertainty about the benefits of activities etc. are the major hurdles in the formation of self help groups. The income from the small income generating activities would definitely help to substantiate the rural household activities and food security. The women have a decisive role in the eradication of household poverty. Empowering women with the property rights and banking facilities for the loans would contribute for the household income. The income in the hands of women can contribute more in the household economic status than the income in the hands of men. The economic empowerment of women would certainly help for the social upliftment and eradication of poverty specially from the rural areas. As we continue to work towards a more inclusive and equitable society, it is essential that women's empowerment remains at the forefront of rural development efforts.

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Climate inaction is costing millions of lives Worldwide, warns new Global Report

■ MOHAMMAD HANIEF

A major new global assessment by the Lancet Countdown on Health and Climate Change, produced in collaboration with the World Health Organization (WHO), has issued a stark warning that climate inaction is already claiming millions of lives each year and jeopardizing the foundations of public health, economic stability, and global development. The 2025 report, released ahead of the upcoming COP30 climate conference in Brazil, paints a deeply concerning picture of a world struggling to cope with the growing health impacts of global warming.

The study reveals that 12 of the 20 key indicators that track the health consequences of climate change have reached record levels, reflecting an intensifying pattern of loss, disruption, and inequality. Rising global temperatures, worsening air pollution, and more frequent extreme weather events are causing severe health consequences for people in every region of the world. The findings make clear that the climate crisis is no longer a distant or abstract environmental issue but a direct and escalating threat to human health.

The report attributes a sharp rise in heat-related deaths to steadily increasing global temperatures. The global rate of heat-related mortality has risen by nearly a quarter since the 1990s, amounting to an average of more than half a million deaths annually. The average person experienced around 16 days of extreme heat in 2024 that would not have occurred without climate change, while infants, the elderly, and people with chronic illnesses bore the heaviest burden. Such exposure is pushing health systems to their limits and deepening social and economic vulnerabilities, particularly in low-income regions where access to cooling, clean water, and medical care is limited.

The growing intensity of heatwaves and droughts has also contributed to mounting food insecurity across large parts of the world. In 2023 alone, an additional 124 million people



ple faced moderate to severe hunger as agricultural yields fell and water scarcity worsened. Changing rainfall patterns, soil degradation, and increasing crop failures are undermining food systems and threatening the livelihoods of millions of farmers, while rising food prices are straining household incomes and increasing malnutrition rates.

The report also exposes the staggering economic losses linked to climate inaction. In 2024, excessive heat exposure caused the loss of an estimated 640 billion potential labour hours globally, equivalent to productivity losses worth about US\$1.09 trillion. Older adults faced particularly high mortality risks, with the costs of heat-related deaths alone estimated at US\$261 billion. At the same time, governments around the world continue to pour vast sums of public money into fossil fuel subsidies, which in 2023 reached an extraordinary US\$956 billion - more than triple the amount pledged to support climate-vulnerable nations. In fifteen countries, fossil fuel subsidies exceeded the total budgets allocated to national health systems, underscoring a dangerous misalignment between spending priorities and public welfare. Yet, amid this bleak outlook, the Lancet Countdown report points to significant opportunities for progress and recovery. It notes that many of the same

actions needed to curb greenhouse gas emissions also deliver immediate and measurable benefits to human health. Shifting to renewable energy sources, adopting cleaner transportation systems, and promoting healthier, sustainable diets can dramatically reduce pollution, prevent disease, and improve quality of life. Between 2010 and 2022, global reductions in coal-related air pollution alone are estimated to have prevented around 160,000 premature deaths each year. Renewable energy generation has reached a record 12 percent of global electricity production, creating 16 million jobs and contributing to economic diversification in many countries.

The health sector itself has emerged as an important leader in the transition toward sustainability. Between 2021 and 2022, health-related greenhouse gas emissions declined globally by 16 percent, achieved without compromising the quality of care. Hospitals and health systems across the world are increasingly integrating climate resilience and energy efficiency into their operations, demonstrating that reducing emissions can go hand in hand with better patient outcomes and stronger institutions. Education and awareness are also advancing: two-thirds of medical students worldwide received training in climate and health in 2024, signaling a generational shift in how the medical profession approaches environmental and public health challenges.

Cities and communities are likewise at the forefront of adaptation efforts. Nearly all reporting cities - 834 out of 858 - have either completed or are in the process of completing comprehensive climate risk assessments. These initiatives are helping urban authorities prepare for rising temperatures, extreme weather, and new patterns of disease. In many cases, city-level policies on renewable energy, urban greening, and waste management are yielding cleaner air, safer neighborhoods, and healthier jobs, proving that local action can generate meaningful global impact.

According to WHO data cited in the report, 58 percent of member states have completed health vulnerability and

adaptation assessments, and 60 percent have finalized national health adaptation plans. This progress shows growing recognition that the health sector must play a central role in climate planning and policymaking. However, the pace of implementation remains uneven, and in many regions, limited funding and technical capacity continue to hinder effective adaptation.

Looking ahead to the COP30 conference in Belém, Brazil, the findings of the 2025 Lancet Countdown report are expected to reinforce calls for placing health at the center of climate negotiations. WHO and its global partners intend to use the momentum generated by the report to advocate for greater investments in health-centered climate strategies that safeguard communities and strengthen resilience. The forthcoming COP30 Special Report on Climate Change and Health will highlight the policy measures and financial commitments required to protect populations, reduce inequalities, and achieve the goals of the anticipated Belém Action Plan.

Now in its ninth year, the Lancet Countdown on Health and Climate Change is led by University College London, in partnership with WHO, the Wellcome Trust, and more than seventy academic institutions and UN agencies worldwide. Together, these organizations monitor global progress and assess how the changing climate is shaping patterns of health and disease.

The 2025 report delivers a clear and urgent message: the costs of inaction are mounting at a staggering pace, measured in lost lives, lost livelihoods, and lost opportunities for sustainable growth. Yet, the solutions are within reach. Accelerating the shift to clean energy, strengthening public health systems, and building resilience at every level of society can prevent countless deaths and improve well-being across generations. In recognizing health as the strongest motivation for climate action, the world has an opportunity not only to avert a planetary crisis but to secure a healthier, fairer, and more sustainable future for all.

Lifeline of Jammu and Kashmir: Protecting Forests, Preventing Fires, and Conserving Water for a Sustainable Future

■ DR RAKESH VERMA

Nestled in the majestic Himalayas, the Union Territory of Jammu and Kashmir (J&K) stands as a testament to nature's grandeur, with towering mountains, verdant valleys, and pristine rivers. Among its most invaluable resources, forests form the backbone of the region's ecological balance and the lifeline of its rivers. Protecting these forests, preventing devastating fires, and conserving water are not merely environmental concerns; they are essential steps toward securing a sustainable future for the people of J&K.

The forests of J&K are complex ecosystems that provide multiple ecological, economic, and social benefits. One of their most critical roles is regulating water. Forests act as natural sponges, absorbing rainfall and snowmelt, which are gradually released into streams and rivers, ensuring a continuous and reliable water supply throughout the year. The dense canopy of trees intercepts rainfall, reducing its direct impact on the soil and minimizing erosion. Meanwhile, root systems bind the soil, preventing landslides and maintaining terrain stability, which is particularly crucial in the hilly and mountainous landscapes of the region.

Beyond water regulation, J&K's forests are home to a rich diversity of

flora and fauna, including numerous rare and endangered species. These forests provide habitat, food, and shelter for animals, birds, and insects. Protecting forests is therefore critical for maintaining biodiversity and preserving the unique natural heritage of the region. Forests also play a vital role in climate regulation. They absorb carbon dioxide from the atmosphere, mitigating climate change, and release oxygen essential for life. By regulating temperature and humidity, forests create favorable conditions for agriculture and human habitation. Additionally, decaying plant material enriches the soil with organic matter, improving fertility-a vital factor in mountainous regions where soil erosion is a constant threat.

Forests also support the livelihoods of local communities by providing timber, fuelwood, fodder, medicinal plants, and other non-timber forest products. They enable **eco-tourism and recreational activities**, which can generate income and employment opportunities for residents. Furthermore, forests are intrinsically linked to the health and vitality of J&K's rivers, which are essential for drinking water, irrigation, industry, and hydropower generation.

The major rivers of J&K, including the Jhelum, Chenab, and Indus, originate in high-altitude forests and glaciers. The Jhelum River, the lifeline of

the Kashmir Valley, originates from the Verinag spring in Anantnag district and is fed by tributaries originating in surrounding forests. These forests help regulate river flow, preventing floods during monsoons and maintaining water availability during dry seasons. Deforestation in the Jhelum catchment has already caused increased soil erosion, sedimentation, and reduced water quality.

Similarly, the Chenab River, originating from the confluence of the Chandra and Bhaga rivers in Himachal Pradesh, passes through the Jammu region before entering Pakistan. Forests in the Chenab basin play a crucial role in controlling river flow and preventing soil erosion, supporting irrigation and hydropower in the region. The Indus River, flowing from the Tibetan Plateau through Ladakh, also relies on forests in its basin to maintain stability and prevent erosion. Protecting forests is therefore directly linked to sustaining these critical water resources.

Forest fires pose a serious threat to J&K's forests, destroying trees, wildlife, and soil, and contributing to air pollution that affects human health. Causes include human negligence, accidental fires from agricultural practices, electrical faults, and industrial activities. Natural causes, such as lightning strikes, can also ignite fires, particularly during dry

seasons. Climate change exacerbates these risks, with rising temperatures and prolonged droughts making forests increasingly vulnerable.

Water is another precious resource in J&K, and its conservation is critical. Rising population, urbanization, and industrialization have increased demand, while supply is being threatened by climate change, deforestation, and pollution. Conserving water ensures sufficient availability for drinking, agriculture, industry, and energy production in the future.

Strengthening forest management is essential for protecting these vital ecosystems. This includes implementing sustainable harvesting, where only mature trees are cut, leaving younger ones to grow, and ensuring that logging activities are carefully planned and monitored. Reforestation and afforestation are also crucial-planting trees to restore degraded forests and creating new forests in previously barren areas helps increase forest cover and restore ecological balance. Involving local communities in forest management is equally important. Communities often possess traditional knowledge and can play a vital role in protecting forests. Providing them with economic incentives and including them in decision-making encourages stewardship and discourages illegal activities. Strict enforcement of laws against illegal logging and

encroachment is also necessary to maintain forest integrity.

Preventing forest fires is another critical strategy. Public awareness campaigns can educate communities about fire risks and preventive measures. Fire prevention techniques, such as creating firebreaks and clearing vegetation around settlements, help reduce the likelihood of fires spreading. Early detection systems-such as watchtowers, aerial patrols, and rapid-response firefighting teams-ensure quick action against emerging fires. Additionally, training local communities in firefighting and equipping them with proper tools enhances preparedness and protection.

Conserving water in J&K requires a combination of strategies. Water harvesting, through rooftop collection or reservoirs, captures and stores rainfall for future use. Employing efficient irrigation methods, such as drip and sprinkler systems, reduces water wastage in agriculture. Recycling wastewater for non-potable purposes, such as irrigation and industrial use, helps lower demand for fresh water. Public education on water-saving practices and water pricing policies that encourage conservation also play important roles in sustainable water management.

Protecting forests, preventing fires, and conserving water is a shared responsibility. The government must

develop and implement policies, enforce laws, provide funding, and promote awareness. Local communities should actively participate in forest management, report illegal activities, and adopt sustainable practices. Businesses must minimize environmental impact, invest in water-efficient technologies, and support conservation initiatives. Individuals play a key role by conserving water, avoiding activities that could cause fires, supporting sustainable products, and educating others about environmental stewardship.

The forests of Jammu and Kashmir are the lifeblood of the region, supporting rivers, biodiversity, and local livelihoods. Protecting forests, preventing fires, and conserving water are indispensable for securing a sustainable future. Strengthening forest management, promoting water conservation, and involving all stakeholders-government, communities, businesses, and individuals-can ensure that J&K's forests and rivers continue to provide ecological, social, and economic benefits for generations.

The health of our forests is indeed the health of our future. By taking collective responsibility and implementing effective conservation measures, Jammu and Kashmir can preserve its natural heritage and build a sustainable, prosperous future for its people.

