

## Rise in Temperatures: A Warning

The unusual rise in temperatures being witnessed across several parts of the country and the world is no longer an occasional anomaly; it is becoming an alarming pattern. Winters are becoming shorter and milder, while summers arrive earlier and grow increasingly intense each year. This trend is not just a matter of discomfort but a serious environmental and public health concern that demands urgent attention.

Over the past few years, many regions have recorded temperatures significantly higher than historical averages. Heatwaves are beginning earlier in the season and lasting longer than before. Even traditionally cooler months are witnessing unexpected warmth. Such fluctuations disturb natural cycles, affect agriculture, strain water resources, and increase the risk of health emergencies, particularly for vulnerable populations such as the elderly, children, and outdoor workers.

One of the most evident consequences of rising temperatures is the growing pressure on water availability. Higher temperatures accelerate evaporation from rivers, lakes, and reservoirs, while also increasing demand for water in households and agriculture. Farmers, who depend heavily on predictable weather patterns, are finding it increasingly difficult to plan their crops. Early heat can damage standing crops, reduce yields, and threaten food security. In many areas, changing temperature patterns also encourage the spread of pests and diseases that further harm agricultural productivity.

The impact on public health is equally serious. Prolonged exposure to extreme heat can lead to dehydration, heat exhaustion, and heatstroke. Hospitals often see a rise in heat-related illnesses during unusually warm periods. In addition, warmer temperatures can worsen air pollution by increasing the formation of harmful ground-level ozone, which aggravates respiratory problems such as asthma and bronchitis.

Urban areas are particularly vulnerable due to the "urban heat island" effect, where concrete structures, asphalt roads, and limited green cover trap heat and raise temperatures even further. Rapid and unplanned urbanization has reduced tree cover and open spaces that once helped regulate local climates. Without adequate planning, cities risk becoming increasingly uncomfortable and unhealthy for residents.

The unusual rise in temperatures is closely linked to broader environmental challenges, especially climate change. Increasing greenhouse gas emissions from industries, vehicles, and energy production are contributing to global warming. Deforestation and loss of biodiversity further weaken the planet's ability to regulate temperature and maintain ecological balance.

Addressing this challenge requires both immediate and long-term action. Governments must strengthen climate adaptation strategies, including early warning systems for heatwaves, better urban planning, and improved water management. Expanding green spaces, promoting tree plantation drives, and encouraging energy-efficient infrastructure can help reduce the intensity of heat in cities.

Equally important is the role of individuals and communities. Simple measures such as conserving water, reducing energy consumption, using public transport, and planting trees can collectively make a significant difference. Educational institutions and civil society organizations also have a vital role in spreading awareness about environmental responsibility and sustainable living.

The unusual rise in temperatures should serve as a wake-up call rather than a temporary headline. Climate patterns that once seemed stable are now shifting, reminding us that human actions have far-reaching consequences for the environment. If timely and collective action is taken, it is still possible to slow down the damage and protect the planet for future generations.

Ignoring the warning signs, however, would only deepen the crisis. The rising heat is not merely a seasonal inconvenience; it is a clear signal that the time for decisive action has arrived.

## Rising temperatures and a dry season across Jammu and Kashmir

■ MOHAMMAD HANIEF



The winter of 2026 in Jammu and Kashmir has stood out as one of the most unusual in recent memory. Traditionally, February and early

March represent the final phase of winter in the region. The season is typically marked by cold mornings, snowfall in the mountains, and a gradual warming that signals the approach of spring. This year, however, the familiar rhythm of winter has been noticeably absent. Across both the Jammu division and the Kashmir Valley, temperatures have remained well above normal levels while the region has simultaneously experienced a prolonged spell of dry weather.

For residents, the difference has been evident in daily life. In the Jammu region, afternoons during late February and early March have felt surprisingly warm, with bright sunshine replacing the expected winter chill. Temperatures in several parts of the region have been closer to what is normally experienced in April. Hill towns that usually retain a cool atmosphere during this period have also experienced milder conditions, reinforcing the sense that winter passed more quickly than usual.

The Kashmir Valley, which typically remains cold even after the harshest winter period known locally as Chhilaikalan, has also experienced an unusually mild season. While early mornings and nights still carried traces of winter, the afternoons often felt more like early spring. The lack of prolonged cold spells has been particularly noticeable in rural areas where people traditionally rely on heavy winter clothing and heating arrangements well into March.

Equally striking has been the persistent dryness of the season. Winter precipitation—both in the form of rain and snowfall—plays a crucial role in the ecological and economic life of Jammu and Kashmir. Snowfall in the mountains replenishes water sources, sustains agriculture, and supports winter tourism. Yet this year, many areas received far less precipitation than expected. Snowfall was sporadic and often short-lived, while rain events were limited.

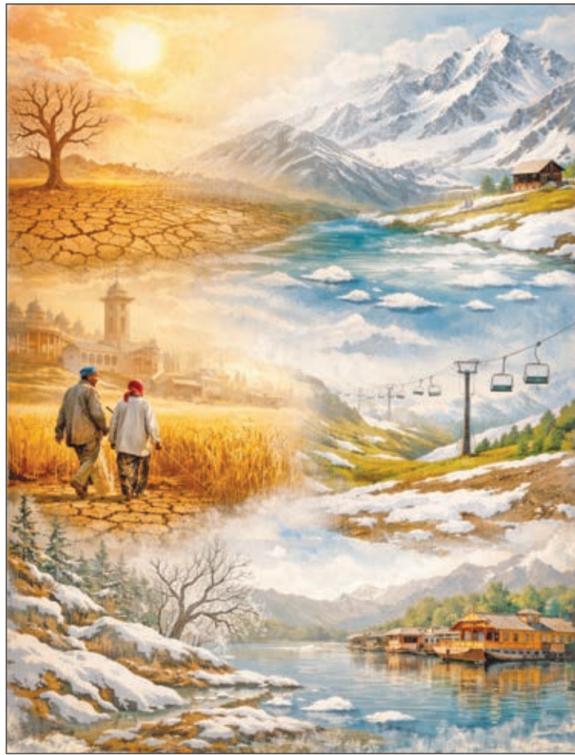
This unusual weather pattern is largely linked to the behavior of atmospheric systems known as

Western Disturbances. These weather systems originate over the Mediterranean region and move eastward toward the Indian subcontinent, bringing winter rain and snow to the western Himalayas. Under normal circumstances, several of these disturbances pass through the region during the winter months, maintaining the snow cover in the mountains and keeping temperatures relatively low.

During the winter of 2026, however, Western Disturbances were weaker and less frequent. As a result, long stretches of clear skies prevailed across the region. While clear weather can be pleasant, it also allows greater solar radiation to reach the ground during the day, leading to warmer temperatures. Without cloud cover or precipitation to moderate the climate, daytime temperatures rose steadily above seasonal averages.

The impact of this dry winter has been particularly visible in the Kashmir Valley. Snow that would normally blanket fields, orchards, rooftops, and roads for extended periods was largely absent in many low-lying areas. Where snowfall did occur, it melted quickly under the influence of bright sunshine and relatively warm daytime conditions. For many residents, the landscape looked unusually bare for a region that is usually associated with picturesque winter snow.

The early melting of snow and the warm conditions have also accelerated seasonal changes in vegetation. In several parts of the Valley, plants and trees have shown early signs of budding and flowering. While the arrival of blossoms often symbolizes the beauty of spring, premature blooming can create challenges for agriculture. Crops and fruit trees are adapted to specific temperature patterns, and when seasons shift unexpectedly, these biological cycles can become disrupted. Farmers and orchardists across the region are therefore observing the changing weather with concern. The horticulture sector, particularly apple cultivation, forms a vital part of Kashmir's economy. Apple trees require a certain number of chilling hours during winter to ensure proper flowering and fruit development. When winters become warmer and shorter, the natural dormancy cycle of these trees can be affected, potentially influencing crop yields later in the year. Similarly, crops such as wheat and mustard depend on relatively cool temperatures during their growth stages.



Warmer conditions in late winter can accelerate plant growth but may shorten the period needed for proper grain formation. Farmers worry that such changes, if repeated frequently, could gradually alter agricultural productivity in the region.

The dry winter has also raised concerns about water availability in the months ahead. Snowfall in the Himalayas serves as a natural reservoir, gradually releasing water as temperatures rise during spring and summer. This meltwater feeds rivers, streams, and irrigation channels that sustain agriculture and daily life. When snowfall is reduced, the flow of water during the warmer months may also decline.

For a region where agriculture, hydropower generation, and drinking water supply all depend on mountain water sources, reduced snowfall can have far-reaching consequences. Although a single dry season may not immediately create severe shortages, repeated winters with below-normal snowfall could gradually affect water security. The tourism industry, another important pillar of the region's

economy, has also been affected by the unusual weather conditions. Winter tourism in Jammu and Kashmir relies heavily on snowfall, particularly in high-altitude destinations such as Gulmarg and Pahalgam. These locations attract visitors from across India and abroad who come to experience skiing, snowboarding, and other snow-based activities.

This year, however, the limited snowfall shortened the effective winter tourism period in several areas. While higher elevations retained some snow, lower regions witnessed faster melting. Businesses that depend on winter sports therefore faced uncertainty. At the same time, the pleasant weather attracted visitors who preferred mild conditions, demonstrating how changing weather patterns can alter tourism dynamics.

Beyond its immediate effects, the unusual winter of 2026 has also renewed discussions about climate change in the Himalayan region. Scientists have long noted that mountain ecosystems are particularly sensitive to global warming. Research conducted over the past few decades

suggests that the Himalayan region is warming at a faster rate than many other parts of the world.

This warming trend can influence snowfall patterns, glacier stability, and seasonal temperature cycles. Warmer winters, shorter snow seasons, and earlier springs are among the changes that researchers have increasingly documented across the Himalayan belt. While individual weather anomalies are not uncommon, repeated occurrences of unusually warm winters may indicate a gradual shift in regional climate patterns. For communities in Jammu and Kashmir, such changes carry significant implications. The region's economy and culture are closely intertwined with its climate. Agriculture depends on seasonal temperature cycles, tourism relies on snowfall and natural beauty, and water resources originate from mountain snow and glaciers. As a result, even subtle shifts in weather patterns can affect livelihoods and ecosystems. The winter of 2026, with its combination of dry conditions and elevated temperatures, offers a glimpse into how sensitive these systems can be to climatic variations. While it remains uncertain whether this winter represents an isolated anomaly or part of a longer-term trend, it has undoubtedly drawn attention to the need for greater climate awareness and planning.

Farmers may need to adapt cropping practices, tourism operators may explore more diverse seasonal activities, and policymakers may strengthen efforts to monitor and manage natural resources.

For now, as spring gradually unfolds across the region, residents are adjusting to the changing landscape. Snow-covered fields are giving way to green meadows earlier than usual, and rivers are beginning their seasonal flow. Yet the memory of a winter that remained dry and unexpectedly warm will likely linger.

The season has served as a reminder that the delicate balance of climate in the Himalayan region is not immune to change. Whether the winter of 2026 becomes an exception or a sign of evolving climatic trends will become clearer in the years ahead.

What is certain, however, is that the experience has prompted many in Jammu and Kashmir to reflect more deeply on the fragile relationship between nature, climate, and human life in the mountains.

(The author is a senior analyst)

## Catalysing Green Gold: Farm to Home

■ DR. BANARSI LAL

The narrative across the globe is calling for positive shift towards People, Planet and Prosperity. Investments into nature-friendly value chains offer opportunities to adopt sustainability through environment-friendly business practices, promote responsible production and consumption while striving to improve the livelihoods of communities. Bamboo is an important plant gifted by nature in tropical and subtropical areas of the world. It is also called as wonder plant, green gold, emperor of all grasses, wood of the poor etc. It is used by the people in their every-day utilities. It is closely interwoven with the life of the people in several ways. It can be used as a food, fodder, construction material, paper, mats, musical instruments, paintings etc. Bamboo has multiple economical, ecological and social values. Union Territory Jammu and Kashmir lies in the North West of the country. About 19.95% of the total geographical area of J&K is covered under forests. A large part of the geographical area of the UT is under permanent snow cover, glaciers and thus unable to support trees growth. The national level goal in forestry is to cover at least two thirds of the total area in the hilly regions under forests and trees cover. Union Territory of Jammu and Kashmir adopted the forest policy to maintain adequate forests in various regions of the UT in 2011. There is need to popularize bamboo cultivation particularly in the wastelands as bamboo cultivation has immense potential in J&K. Bamboo production is a highly commercial industry and its cultivation reduces the soil erosion. It can be a source of extra income and employment for the farmers of this hilly UT.

Millions of Indians rely on bamboo for a part of their livelihoods. India is the second richest country in bamboo genetic resources after China. These two countries together have more than half the total bamboo resources in the world. About 136 species of bamboos are reported in India. Bamboo is grown on about 9.57 million hectares in India which constitutes about 12.8% of the total area under forests. Out of the 22 genera available in India, 19 are indigenous and three exotic. The annual production of bamboo in India is about 4.6 million tonnes. The annual yield of bamboo per hectare varies between 0.2 and 0.4 tonnes depending upon the intensity of

stocking and biotic interferences. The economic impact of the agro forestry-based bamboo system may influence general economic development of the country. It is mostly found in N-E States, Chhattisgarh and Andaman and Nicobar Islands and Jammu and Kashmir. Bamboo is one of the fastest growing plants on the earth. Its growth rate ranges between 30cm to 100cm per day. It generates more oxygen than equivalent stand of the trees. It protects against ultra-violet rays and is an atmospheric and soil purifier. Bamboo grows at a fast rate. A story tells that once a forest officer kept his hat on a fast growing bamboo culm and forgot to take it with himself. The next day, he saw that the hat was beyond his hand's reach in 24 hours.

Bamboo has manifold uses from cradle to coffin. Bamboo has many uses as a substitute for fast depleting wood and as an alternative to more expensive materials. It can be used in paper industry, to make small footbridges, water pumps, irrigation pipes etc. In rural areas it can be used as fodder, in making brooms, food, buckets etc. Nutrient analysis of edible bamboos indicated that it contains 77% to 84% moisture, 4% to 7% protein, 5% carbohydrates, 12-13 mg/100G vitamin C and Na, K, Ca, Mg and P as minerals. Bamboo has the potential for checking soil erosion, fast vegetative growth cover to deformed areas and road embankment stabilization. Bamboo tensile strength is 28000 per square inch versus 23000 for steel. It can be used for making pillars, roofs, ceiling, walls etc. It has been traditionally used to make medicines to treat asthma, cough and fever etc. It is also used to make certain structures in earthquake prone areas, in music and arts.

Currently, the market for sustainable and eco-friendly goods is growing and customers are interested in the purchase of ethically made products. Planning Commission has set up a National Mission on Bamboo Technology and Trade Development. It has been realized that bamboo is very important in poverty eradication and employment generation. The major objective of National Mission on Bamboo is to implement an action plan for keeping bamboo as a key component in the national scene to generate employment, to protect environment degradation and give a boost to bamboo industry. Through various researches in various countries, it has been observed that alcoholic beverages

can be made from bamboo leaves, charcoal can be made from bamboo, laminated bamboo mats can be made for disaster prone areas. Therefore, bamboo has important role in strengthening rural economy. There is need to increase the area and productivity of bamboo. Bamboo plays an important role in rural and socioeconomic development of the farmers. Some farmers grow bamboos in and around their farmlands to increase their income. The development of artisan skills for handicrafts and wider utility of bamboo provides more employment opportunities and better income distribution for the rural people. There is a dire need to aware the bamboo growers about the latest information on introduction, phenology, reproductive biology, propagation, exchange of germplasm, conservation status etc. There is also a need for the introduction of other species of bamboo of ethno biological significance. It has been observed that most of the bamboo growers do not possess up-to-date information on ecological and growth parameters, morphological variability's, conservation value, methods for multiplication etc.

At regional levels systematic survey, range of distribution, flowering periodicity, ethno biological utilization, phenology, floristic compositions, introduction in production forests and homelands of rural areas need to be studied by concerned organizations located in the region. Many of these organizations lack funds, manpower and expertise to assess resources. Inter-institutional support both at regional and inter-regional levels and interaction may help in developing, improving and managing the bamboo cultivation. There is need to develop networking on conservation of bamboo forests, gardens, arboreta, rural homesteads etc. Bamboo growers should get the institutional support at regional, national and international levels. GIS based information system should be developed for the protected areas. Ethno biological approach should be adopted towards the cultivation, preservation of rare and threatened species of bamboo. There should be collaboration between the bamboo growers and scientists. Really bamboo has traversed a long path with a change in perception from it being termed as 'Poor Man's Timber' to being acknowledged as 'Green Gold'.

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## Character and Patriotism

■ ARUN KUMAR GUPTA

Human existence is not defined merely by biological continuity or social participation; it is shaped, refined, and ultimately judged by character. Character is the invisible architecture of a person's life, formed through values, discipline, and conscious conduct. Just as the natural elements possess inherent properties that govern their behaviour, human beings too manifest defining qualities that guide their choices. Character is not a single trait but a synthesis of temperament, integrity, restraint, and responsibility. It reveals itself not in declarations but in consistency, not in appearances but in actions sustained over time.

Character cannot be reduced to politeness, courtesy, or outward refinement. These may be expressions of civility, but they do not, by themselves, constitute moral depth. True character is comprehensive. It reflects how an individual thinks, how they act when unobserved, how they respond to power, temptation, adversity, and how their decisions affect others. A person may exhibit personal discipline yet fail ethically in professional or social life. Another may appear gentle in manner yet cause harm through negligence or self-interest. Such contradictions expose the inadequacy of superficial assessments and remind us that character must always be evaluated holistically. The scope of character extends beyond the individual into society. Personal character governs one's private conduct, social character determines one's responsibility toward others, and civic character shapes one's contribution to the collective. When these dimensions align, character becomes a stabilising force. When they diverge, it creates moral dissonance that weakens both the individual and the institutions they inhabit. A society that normalises fragmented character gradually erodes trust, cohesion, and ethical clarity. Closely intertwined with character is patriotism, a concept often misunderstood and frequently misrepresented. Patriotism is not an emotional outburst nor a performative display. It is not measured by slogans, rituals, or symbolic enthusiasm. True patriotism is a disciplined commitment to the nation's moral, social, and intellectual well-being. It is reflected in conduct that strengthens institutions, protects unity, and advances collective progress. Any action that weakens citizens, deepens divisions, or undermines social harmony cannot be reconciled with genuine patriotism, regardless of the language used to justify it.

A nation is not an abstract entity; it is the lived reality of its people. Strengthening the nation therefore begins with strengthening its citizens. When individuals act with integrity, responsibility, and fairness, they reinforce the nation's foundation. When personal gain overrides ethical duty, the damage is not isolated; it reverberates through society. Patriotism divorced from character becomes hollow, often degenerating into noise without substance. Conversely, character without a sense of national responsibility remains incomplete, lacking a higher purpose beyond personal virtue.

History consistently demonstrates that nations rise not merely through material advancement but through moral coherence. Economic growth and technological progress lose their meaning when unaccompanied by ethical restraint. A society may prosper temporarily through opportunism, but such prosperity is fragile. Sustainable national strength requires a population guided by conscience, discipline, and a shared sense of responsibility. This is where character and patriotism converge into a single moral force.

Education plays a decisive role in cultivating this convergence. However, education must be understood in its truest sense, not as the accumulation of information or credentials, but as the formation of judgment and values. The earliest lessons of character are imparted within the family, where behaviour speaks louder than instruction. Educational institutions refine these lessons by exposing individuals to ideas, reasoning, and moral reflection. Society at large either reinforces or undermines this process through its norms and priorities.

Learning does not occur solely through formal instruction. It unfolds through observation, dialogue, reading, and lived experience. When individuals are surrounded by integrity, fairness, and responsibility, these qualities are absorbed naturally. When compromise and expediency are rewarded, character weakens silently. Patriotism too follows this pattern. It cannot be imposed through rhetoric; it must be cultivated through example. Individuals learn love for their nation by witnessing actions that place collective welfare above personal interest.

One of the defining challenges of the modern age is the gradual erosion of character under the pressure of convenience and ambition. When success is measured exclusively by wealth, influence, or visibility, ethical considerations are often sidelined. This erosion does not announce itself dramatically; it begins subtly, through small compromises justified as necessity. Over time, these compromises normalise misconduct, corrode institutions, and fracture social trust. A nation that tolerates such erosion eventually confronts instability, regardless of its material achievements.

Distorted patriotism emerges when emotional attachment replaces moral responsibility. Such patriotism seeks affirmation rather than accountability and often confuses loyalty with conformity. True patriotism, by contrast, is thoughtful and disciplined. It demands honesty, self-criticism, and the courage to act rightly even when it is inconvenient. It recognises that dissent rooted in conscience can be more patriotic than silence motivated by fear or self-interest. Consistency is the true measure of both character and patriotism. Occasional gestures or symbolic acts cannot compensate for habitual negligence. Integrity must permeate daily life, from professional conduct to civic duties. Respect for law, fairness in dealings, responsibility toward public resources, and empathy in social interactions are all expressions of national commitment. These quiet acts, performed without expectation of recognition, constitute the most authentic form of patriotism.

Leadership bears a heightened responsibility in this context. Leaders shape not only policies but moral expectations. When leadership exemplifies integrity, accountability, and respect for national interest, it elevates collective standards. When it normalises compromise or prioritises personal gain, it legitimises ethical decline. A nation's moral direction is often a reflection of the character of those entrusted with authority. Leadership devoid of character may achieve temporary success, but it inevitably weakens the moral fabric of society. The relationship between character and patriotism is therefore inseparable and reciprocal. Character provides the ethical foundation upon which patriotism rests, while patriotism gives character a broader, collective purpose. Together, they produce individuals who are not merely competent but conscientious, not merely ambitious but accountable. Such individuals form societies that are resilient, cohesive, and capable of progress without moral compromise. Ultimately, the true strength of a nation lies not in displays of power but in the character of its people. Material resources, strategic advantages, and institutional frameworks are meaningful only when animated by ethical conviction. A society that invests in character formation invests in its future stability. A nation that nurtures principled patriotism ensures that progress does not come at the cost of conscience.

In essence, character and patriotism are not ideals reserved for rhetoric; they are practical necessities for national survival and dignity. They demand continuous cultivation through thought, conduct, and conscious choice. When individuals embody integrity and responsibility, and when patriotism is expressed through constructive action rather than noise, a nation advances not only in strength but in moral stature. Such progress is enduring, for it rests upon the firm ground of character, the true moral spine of a nation.

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