# Onus on govt and people for a pollution-free Diwali

DIWALI pollution has become an annual grey rhino event—a looming, predictable threat that we all recognise but choose to ignore. Black swan occurrences are unforeseeable, and therefore very difficult to deal with. The Covid-19 crisis was a black swan about which no one knew. Hence the untold loss of life and incalculable damage to the economy. The inability to tackle grey rhinos, however, is symptomatic of sclerosis in Indian statecraft, the callousness of the political class, and the irresponsible behaviour of people in general. Like every post-Diwali, news headlines screamed of various parts of the country, especially north India, becoming gas chambers. Delhi and the surrounding National Capital Region (NCR) being the worst affected with PM2.5 readings, which capture levels of smoke, flying off the charts. Many of the capital's air monitoring stations went blank on Diwali night. The missing hours were partially filled the next day by the Delhi Pollution Control Committee (DPCC), showing the smoke level peaked at 3,744 µg/m³, more than 60 times the national 24-hour standard of 60.

Another news report said that in Delhi, which recorded its worst Diwali-day air quality in five years, pollution levels touched nearly 5,000 µg/m³ at some monitoring stations—that is, over 80 times the safe limit. Even the peninsular region was not spared, with Hyderabad's average air quality index (AQI) zooming to 509. Although, coastal Chennai and Mumbai were better, Kolkata was not spared, as AQI spiked above 600. Coastal centres in Gujarat too had very high AQI numbers. At the heart of the problem is the lack of concern in the quarters that matter. Our political elite, cutting across party lines, have almost zero regard for real issues like pollution. Despite harsh commentary in public discourse, media outcry, and severe reprimands by the higher judiciary, the powers that be are insouciant about the lives and health of millions of people who suffer because of debilitating pollution. Little, if anything, has been done to ameliorate the conditions; if there are any short, medium and long-term measures to address the issue, they are not perceptible.

It is time our political masters woke up and took effective steps to rectify the situation. This requires moving beyond the ritualistic responses that follow every Diwali, when governments issue advisories, announce restrictions, hold meetings, and promise action, only for the problem to resurface with renewed intensity the following year. What is needed is a comprehensive, coordinated, and time-bound strategy that addresses every significant source of pollution throughout the year, rather than treating it as a seasonal emergency. Governments must invest in public transport, strengthen last-mile connectivity, enforce emission standards, ensure scientific disposal of municipal and agricultural waste, and penalise industrial violators. Stubble burning, construction dust, vehicular emissions, and firecrackers all demand sustained attention, not selective outrage. Equally important is the creation of an institutional framework that assigns clear responsibility to specific authorities and holds officials accountable for measurable outcomes. Political leaders must also lead by example, instead of shifting blame or indulging in partisan point-scoring. At the same time, people too must do their bit. They must adhere to the norms specified by the authorities regarding bursting of crackers. They need to realise that every government intervention will fail without their support. Environmental protection is everyone's responsibility.

# Cultivating resilience: Why crop diversification is Telangana's only scientifically sound climate adaptation

Dr Ramesh Chennamaneni

**An unprecedented drought crisis across 365 mandals in Telangana, driven by a post-monsoon El Niño effect and a 17 per cent rainfall deficit, threatens agricultural collapse until July 2027. To initiate a transition of the state from a vulnerable monoculture to a drought-resistant, resilient agricultural economy ensuring the livelihoods of small and marginal farmers, a comprehensive climate adaptation framework is required. This strategy is anchored by the Mandal-Wise Decentralized Alternative Production Package (MDAPP), localised soil-moisture ecological mapping, and aggressively front-loaded financial assistance through a specialized Green Transition Bonus.**

THE prevailing. The state government has officially declared 365 mandals across 31 districts as drought affected. Chief Minister A Revanth Reddy has warned that this unprecedented El Niño-related water and power crisis could persist until next July. This emergency exposes the deep structural vulnerabilities of our agricultural system and demands alternative strategies.

From an ecological perspective, crop diversification serves as a scientifically validated climate change adaptation strategy specifically engineered to combat acute hydrological stress. Replacing continuous paddy with low-water alternatives directly intercepts the drought cycle by altering the microclimate and soil physics of the farm. Deep-rooted alternative crops break up compacted subsoil layers, increasing capillary porosity and maximizing water infiltration when erratic rains do occur. By maintaining ground cover through diverse cropping architectures, farmers drastically lower soil surface evaporation and buffer the field against extreme thermal gradients. Crucially, integrating diverse root profiles optimises water extraction across varying soil depths rather than exhausting the topmost layer, significantly increasing regional water-use efficiency and preserving precious residual moisture within the root zone during extended dry spells. However, transitioning from predictable paddy fields to complex alternative crop systems introduces severe operational hurdles for small and marginal farmers.

For these smallholders, climate adaptation is not just an ecological goal—it is a high-stakes problem of daily farm management, labor allocation, and survival.

### The smallholder farm management crisis

The 2026 monsoon concluded with a 17 per cent overall rainfall deficit, leaving 18 out of 33 districts severely deficient. The total kharif crop area dropped from 139.28 lakh acres to 126.06 lakh acres, leaving standing crops withering. While traditional



paddy cultivation fell by 18 per cent, the remaining acreage faces disaster. Out of 30 lakh agricultural pump sets, almost 15 lakh have run dry due to the rapidly falling water table.

When the state government appeals to smallholders to avoid paddy and shift to alternative crops like pulses, millets, or oilseeds, it overlooks a critical farm management reality. Small and marginal farmers operate on razor-thin margins. Paddy is highly automated, easy to store, and insulated by guaranteed state procurement.

In contrast, alternative crops require intensive, localized agronomic management: precise sowing windows to catch brief moisture windows, entirely different seedbed preparation, specialized weeding, and delicate handling during harvest. Forcing a smallholder with less than two acres to learn and manage these volatile new crop dynamics without structural support creates a severe policy asymmetry. It expects the most vulnerable stakeholder to absorb 100% of the operational and financial risk.

### Localized agroecological realities

Climate change impacts Telangana's distinct agro-ecological zones differently, meaning top-down, uniform advisories broadcasted via Rythu Vedikas fail to match localized realities:

**The northern zone:** Experiencing erratic rains and rising thermal stress that alter the growing period.

**Central zone:** Facing severe groundwater depletion that rapidly strips moisture from shallow root zones.

**The southern zone:** High evaporation rates on shallow soils lead to immediate crop wilting during short dry spells.

To address this, the state must implement a Mandal-Wise Decentralized Alternative Production Package (MDAPP). This framework maps soil taxonomy and aquifer health across all 621 mandals to deliver a tailor-made alternative crop grid specifically optimized for smallholder management.

In zone A (deep black cotton soil with over-exploited groundwater in specific mandals within Adilabad, Nalgonda, and parts of Khammam), high soil water-retention capacity dictates a total ban on Yasangi paddy. This is replaced by long-staple cotton intercropped with pigeon pea, Bengal gram, black gram, green gram, or soybean.

In sone B (red sandy loams with critically low water tables across Mahabubnagar, Medak, and Rangareddy), the low moisture profiles require drought-hardy options like groundnut, castor, pearl millet, finger millet, foxtail millet, sorghum, and sesame.

In zone C (alluvial and medium loamy soils under deficit canal networks in Nizamabad, Karimnagar, and Warangal), flood irrigation must be eliminated in favor of safflower, mustard, green gram, sunflower, and linseed.

To institutionalise this, physical soil health cards must become digital MDAPP Smart Passbooks. When a smallholder registers their land, the portal automatically tags their mandatory crop code, blocks restricted paddy entries, and unlocks tailored input-subsidy modules.

### Insulating the smallholder transition

The primary barrier to diversification is the immediate liquidity crunch faced by smallholders when changing cultivation patterns. MDAPP restructures direct benefit transfers by splitting investment support into a two-tier framework: the base Rythu Bharosa support plus a legally ring-fenced Green Transition Bonus (GTB) of ₹3,000 per acre per season, paid exclusively for alternative crops.

To prevent smallholders from falling back on high-interest private moneylenders for new tools and inputs, cash flows are front-loaded. During the pre-sowing phase, 60 per cent of the combined seasonal payout is deposited directly into the farmer's account. The remaining 40 per cent is released 30 days after sowing following automated remote-sensing crop verification. Furthermore, Telangana's 2,600+ Rythu Vedikas must be upgraded into local logistics hubs. Upon registration, smallholders will receive an SMS voucher redeemable at the Rythu Vedika for 100 per cent subsidized, high-yield, drought-resistant seeds developed by PJTSAU. To manage the technical shift in water utilization, alternative crops are paired with Micro-Irrigation Direct-Delivery (MIDD). Any smallholder registered under MDAPP automatically qualifies for a 90 per cent subsidy on drip or sprinkler kits, installed by technical teams within seven days.

### Eliminating market volatility

The final anchor of MDAPP eliminates market price volatility. The state must establish a dedicated, legally backed statutory body: the Telangana Alternative Crop Procurement Board (TACPB). Operating under a 120 per cent MSP Procurement Accord, the TACPB will legally guarantee to buy 100 per cent of the alternative crop volume at a 20 per cent premium over Central MSP.

This bonus directly compensates smallholders for the lower physical yields characteristic of pulses and millets relative to paddy. By processing harvests at decentralized Rythu Vedika weighbridges and clearing payments via DBT within 72 hours, Telangana can effectively withstand the serious economic and social vagaries of one of the worst droughts it has been experiencing since decades.

*(The writer is a former MLA and former faculty at Humboldt University)*

# *We need to deal with natural calamities more effectively*



Ravulapati Seetaramarao

No matter how big the storm is, if N Chandrababu Naidu oversees it, it becomes possible to contain the ferocity. As a chief minister who keeps losses within bounds, he calmly restores what is lost, while the storms gradually cross the coast. When Arnav and Murasu cyclones occurred, those storms extended from afar, and with several precautionary measures in place, the two cyclones that followed quickly caused less loss of life.

When the two struck Andhra Pradesh, Arnav that arrived on October 28 was estimated to cause about ₹4,526 crore in damage. The Murasu cyclone arrived on November 3. However, this damaged copper crops across 52,500 hectares. Preliminary estimates indicate that only about eight people lost their lives due to these two cyclones. The first cyclone reportedly caused crop damage over 90,000 hectares in the southern Odisha region. As always, after the central government officials visited at the ground level, the initial loss estimates were used to decide on financial assistance and other forms of support. Reports indicate that states like Telangana, Karnataka, and Tamil Nadu have extended necessary aid to Andhra Pradesh during this crisis.

With the help of the Real-Time Governance Society (RTGS) and technical experts, casualties and property losses were minimised.

When Hudhud struck in October 2014, Chandrababu Naidu stood ahead of the officials with remarkable initiative, guiding in many ways and fighting the storm to safeguard lives, property, and livelihood in the face of the cyclone. Governments strive to lend a hand during crises, sometimes without people noticing, but it is very rare for a leader at the level of the Chief Minister to personally drive aid efforts across the ground. For politicians who think power is to be enjoyed, helping in times of trouble is a duty and a goal; for Chandrababu, this brought immense adulation and admiration from ordinary people as well. The Hudhud cyclone claimed 63 lives and caused damages worth about Rs 22,000 crore. There has always been a worrying factor about what would happen if a cyclone hit a region. Now, in the two Telugu states and in Odisha, people perceive such calamities as a regular threat—though it is a tragedy when they occur. The handling of such disasters often becomes highly challenging, and corruption tends to harden. Yet for ordinary people, and for those who depend on fishing along the coast, daily life becomes a heavy burden. Those who muster the courage to go out to fish face grim conditions, and the hardships persist until they return safely. Therefore, there is a growing need for skilled professionals who can anticipate such disasters through technology, for enhanced cooperation between state and central government officials, and for proactive, strategic measures to be put in place well in advance.



Along with state authorities, agencies functioning at the central level must act with utmost precautions to protect crops from these calamities. Rapid, well-considered strategic decisions that minimise losses have become indispensable. Likewise, government agencies responsible for timely compensation and delivering relief at the field level must increasingly adopt decisive actions. The Prime Minister's Crop Insurance Scheme (Crop Insurance Scheme) was launched by the Centre a decade ago, but its utilisation at the field level remains limited. There are no records showing that the plan is being implemented in a manner intended to compensate farmers for losses caused by climate-induced natural adversities. If the government can bring all farmers under this scheme, it would provide some relief to those who suffered losses. It would be beneficial if states took responsibility for taking this scheme to the farmers and establish government machinery at the field level that provides relief to farmers.

Initially, there was no thought of reclaiming these compensation payments by the governments. However, with the 15th Finance Commission's recommendations, within two years prior, the national and state Disaster Response Funds were reclassified not as relief funds but as part of recovery and reconstruction under this scheme. Governments must consider how appropriate this is. When natural disasters disrupt states in such dreadful ways and push livelihoods into dire straits, the central government should be ready to provide urgent financial assistance and take all possible supportive measures. Only then will federalism and democracy have meaning and usefulness. Co-operative federalism should be actualised as a true federal arrangement in which the central government can function in a manner aligned with democratic values.

Presently, cyclones are occurring on a regular basis in one state or the other. To effectively deal with these natural calamities, and lessen the effect of losses of properties, crops and deaths, separate mechanisms at the state and national levels are urgently called for. Though disaster management machinery is now functioning at both levels, the inadequacy and technical assistance is evident. Hence, a specialised scheme is to be urgently thought of to give a credible helping hand in containing heavy losses. Best governance is then registered in the minds of affected people.

*(The writer is a retired IPS officer, who has served as an Additional DGP of Andhra Pradesh)*

## LETTERS

### Make preventive healthcare a national priority

WITH reference to "India should focus on its health promotion policies," it is alarming that 10–30 per cent of youngsters is reportedly suffering from health-impacting behavioural issues and conditions. While India has a predominantly young population, lifestyle disorders such as obesity, diabetes, hypertension, stress and lack of physical activity are increasingly affecting them. Equally concerning is that only around 45–47 per cent of Indians are covered by some form of health insurance or healthcare financing scheme. Another common misconception among salaried employees is that the employer-provided health insurance of ₹3–5 lakh is sufficient. However, this may fall short in the event of critical illnesses, major surgeries or prolonged hospitalisation. Therefore, every individual should consider taking an independent personal health insurance policy to ensure continuous financial protection. The government should also prioritise preventive healthcare through regular health screenings, nutritional education, awareness campaigns and promotion of physical activity in schools, colleges and workplaces. A healthy younger generation is essential for India's productivity and economic growth, and prevention must become a national priority rather than merely a medical intervention.

*Nittala Siva Prasad*, Hyderabad-62

### Every Indian must be health conscious

APROPOS your editorial 'India should focus on its health promotion'. It is very important that every Indian must be health conscious, in each situation – eating healthy food, indulging in regular physical activities; and not yielding to habits of smoking, tobacco use and excessive use of alcoholic beverages. Nutrition continues to be a big and vital contributor to healthy living; while the have-nots evolved a meaningful regimen when it comes to eating habits, without compromising on nutrition – it is the rich who fall prey to eating all kinds of junk foods that are unhealthy and having less nutritional content in them. The reality of growing atmospheric pollution, use of excessive pesticides in vegetable crops is being seen as a serious threat to health issues and long-term illnesses. The busy lifestyle, growing stress and untimely regimen about eating lunch and dinner are contributing to severe and unprecedented health issues. The irregular sleep pattern is also said to be the cause for growing cardiovascular ailments – heart attack and stroke. The problem of hypertension has become a regular thing for many. Yoga and meditation practices are beneficial while belly fat is said to be the main cause for heart attack and strokes.

*S Lakshmi,* Hyderabad

### TG govt lacks application

The autocratic decision-making mechanism of Telangana contributes to reversing the existing trend of investments in various sectors. The involvement of stakeholders in decision making exercises of this nature is conspicuous and visible to economic analysts. To attract capital investments to a state in a highly competitive environment in our country needs scientific and professional studies with the invitation of suggestions from experts in various fields. In the absence of such exercise, policy reversals in the midstream only decelerates the momentum built over years. The present state government exhibits immaturity and lack of application of mind in its functioning. This in turn has resulted in the unfortunate stagnation of its economy. It requires introspection by the state cabinet to correct its policy making parameters immediately before the damage becomes irretrievable. With drought conditions already breaking the rural economy during this year, Telangana can ill-afford the luxury of stagnation in other economic spheres. Sooner we correct this, better for the state, it will be

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## BENGALURU ONLINE

### Prove Sangh links in murders or resign: Tejasvi challenges Kharge



BENGALURU: BJP MP Tejasvi Surya has challenged Karnataka Minister Priyank Kharge to produce evidence within three days to substantiate his allegations linking Sangh Parivar members to the murders of journalist Gauri Lankesh and rationalist M M Kalaburgi, or resign from his post.

Reacting to Kharge's remarks at a Muslim League programme in Kerala, Surya said securing justice in the high-profile murder cases required seriousness and commitment rather than political speeches. In a social media post, he said the Home Minister's responsibility was to ensure justice under the rule of law and not pronounce prejudiced judgments from political platforms.

Surya questioned the delay in the trials, pointing out that the chargesheet in the Gauri Lankesh murder case was filed in 2018, while the trial began in 2022. The case is now before its seventh judge, and all the accused are out on bail, he said. . In the Kalburgi murder case, only 33 of the 139 witnesses had been examined by September 2026, highlighting the slow pace of the proceedings, he added.

He said Congress had been in power in Karnataka for most of the period since the murders and that the state government had constituted the SITs. The Home Department must explain its role in ensuring effective investigations and trials, he demanded.

Surya also questioned Kharge's assurance that the cases would be concluded within six months and those responsible would be sent to prison, saying such statements could raise concerns about judicial independence. He asked Kharge to disclose the names of those allegedly linked to the Sangh who had been chargesheeted and provide evidence within three days or resign.

Kharge had alleged that people associated with the Sangh Parivar were behind the murders and expressed confidence that the accused would be brought to justice within six months.

Read more at https://epaper.thehansindia.com

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