> Love one another and help others to rise to the higher levels, simply by pouring out love. Love is infectious and the greatest healing energy.
> -Sai Baba

COLLECTIVE RESPONSIBILITY

The environment is the very foundation of life on Earth, providing us with clean air, fresh water, fertile soil, and the resources essential for survival. Yet, despite its critical importance, our planet is facing unprecedented environmental challenges. Pollution, deforestation, climate change, loss of biodiversity, and unsustainable resource exploitation threaten not only natural ecosystems but also the well-being and future of humanity. In such times, environmental protection is not merely an option-it is a moral and practical imperative.

Human activities have accelerated the degradation of the environment at an alarming pace. Industrialization, urbanization, and intensive agriculture have led to air and water pollution, soil erosion, and depletion of natural resources. Climate change, largely driven by carbon emissions from fossil fuels, has resulted in extreme weather events, rising global temperatures, and melting glaciers. Deforestation has not only destroyed the habitats of countless species but also reduced the Earth's capacity to absorb carbon dioxide, further aggravating climate change. These are not distant problems-they directly impact our health, livelihoods, and security today.

Addressing these challenges requires a multi-pronged approach involving individuals, communities, governments, and global institutions. Governments must implement and enforce stringent environmental regulations, promote renewable energy, and incentivize sustainable practices in industries and agriculture. Policies such as banning single-use plastics, planting trees, and adopting green technologies are crucial steps toward reducing environmental damage. International cooperation is also essential, as environmental issues like climate change, air pollution, and oceanic plastic waste transcend national boundaries.

However, legislation and policies alone cannot suffice. Individual responsibility plays a vital role in environmental protection. Simple actions such as conserving water, reducing energy consumption, using public transport, recycling waste, and planting trees collectively make a significant impact. Public awareness campaigns and environmental education can empower citizens to make informed choices, fostering a culture of sustainability from a young age. Schools, colleges, and community organizations must actively engage youth in environmental activities, as they are the custodians of tomorrow's planet.

The protection of the environment is not just an ecological necessity; it is a social and economic imperative. Clean air and water are fundamental human rights. Sustainable practices ensure the availability of resources for future generations, prevent health hazards, and support economic stability. Moreover, protecting natural habitats preserves biodiversity, which is essential for the balance of ecosystems and the survival of countless species, including humans.

In conclusion, environmental protection is a shared responsibility that demands awareness, commitment, and action at all levels of society. It requires a shift in mindset-from viewing nature as a resource to exploit, to recognizing it as a fragile system that sustains life. By embracing sustainable practices, supporting environmental policies, and raising awareness, we can mitigate the damage already done and safeguard the planet for future generations. Protecting the environment is not a choice; it is an urgent necessity. After all, a healthy planet is the only home we have, and our survival depends on how responsibly we treat it today.

Transforming Energy into Strength: SHANTI's Vision for Viksit Bharat

■ DR. JITENDRA SINGH

When the monsoon first touches the Deccan, a million tiny rivulets knit themselves into rivers. It is not a thunderclap that turns water into force; it is patient joining-stream to stream, village to village-until the flow is confident enough to light a city. India's journey with the atom has felt like that: quiet channels of science converging over decades, now gathering into a river strong enough to power a data centre at midnight, sterilise a meal in the afternoon, and help a clinician save a child by evening.

With the introduction of the SHANTI Bill-the Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India Bill, 2025-we are shaping the riverbed so that this flow reaches every home, industry and institution that needs dependable, clean energy and life enhancing applications.

To understand why this moment matters, we must begin with the context. Before 2014, India's nuclear framework was anchored in two separate statutes: the Atomic Energy Act, 1962, which guided development and control, and the Civil Liability for Nuclear Damage Act, 2010, which provided a no fault compensation regime. Each served its time; each also reflected an era when nuclear capability was primarily a sovereign effort, with very limited pathways for the broader ecosystem-manufacturing, finance, insurance, startups, and advanced research-to participate. SHANTI draws these strands together, repealing both laws and replacing them with a single, modern architecture-in one stroke conferring statutory status on our regulator, the Atomic Energy Regulatory Board (AERB), defining roles and responsibilities with clarity, and opening responsible avenues for public private participation while reserving sensitive functions to the Government.

Comparison tells us how far the river has widened. In the past decade India has achieved self reliance across the nuclear fuel cycle and carried the programme responsibly; now we are ready to scale-towards a national goal of 100 gigawatt (GW) nuclear capacity by 2047, adding reliable baseload power to support AI, quantum computing, indigenous semiconductor fabrication, and large scale data research. The Bill codifies this readiness: it creates a unified licensing and safety authorisation regime; it sets graded liability for operators- Rs 3,000 crore for the largest reactors, down to Rs 100 crore for smaller reactors and fuel cycle facilities-so innovation such as small reactors and small modular reactors (SMRs) can proceed with proportionate safeguards. It also establishes a Nuclear Liability Fund for situations where compensation exceeds the operator's cap, and provides recourse to the international Convention on Supplementary Compensation-because compassion must be as scalable as technology.

Change, in the most meaningful sense, is what the ordinary citizen can feel. In healthcare, nuclear medicine has moved from promise to practice: targeted therapies for childhood blood cancers and prostate malignancies now flow from centres such as Tata Memorial, turning isotopes into instruments of healing. We have made headway in a decade; we are liberalising research pathways so that capable private institutes can add their ingenuity to national capacity. In food and agriculture, radiation technologies already help preserve produce, extend shelf life, and ensure safety; SHANTI recognises radiation facilities and generating equipment, bringing clarity and security to their everyday use-whether in a hospital's therapy wing or a factory's quality line.

Let me explain some of the terms we will live with. A "nuclear incident" is an occurrence (or related series) that causes nuclear damage-or, despite reasonable preventive steps, poses a grave, imminent risk of doing so. "Nuclear damage" is broader than before: it includes loss of life or injury (including long term health impact), loss or damage to property, environmental restoration costs, loss of income linked to environmental use, and the costs of preventive and mitigation measures. A "safety authorisation" is written permission from the AERB; it is what ensures that radiation equipment, radioisotopes, and facilities that expose individuals to ionising radiation are designed, sited, operated and decommissioned under standards that put safety first-always.

Safety is not a slogan; it is a discipline with numbers and routines. India's operating plants are inspected every three months during construction and every six months in operation; licences are renewed every five years; the International Atomic Energy Agency benchmarks our parameters, and the AERB's statutory status now gives it sharper teeth. Radiation is measured in microsieverts: the annual public limit is 1,000 μSv, while emissions at our stations are a tiny fraction-for instance, Koodankulam's is around 0.002 of that unit, Tarapur around 0.2-evidence that design and operation keep doses well below thresholds. Seismic wisdom is built in: eastern and western coastal sites are sited far from high risk zones-hundreds to over a thousand kilometres away-because geography, too, must be engineered into safety.

What changes, then, in the citizen's daily life? First, power you can trust-24×7, low carbon, and not hostage to the weather. When a textile cluster adds an SMR to its energy mix, it stabilises looms and livelihoods; when a district hospital relies on uninterrupted power for imaging, radiotherapy, and digital records, a patient's anxiety is reduced to the one thing no law can cure-waiting time. SHANTI's graded liability regime reduces barriers for smaller investors to build such plants while maintaining strict responsibility, and its unified rules simplify the journey from design to operation.

Second, better redress when things go wrong. The Bill creates an Atomic Energy Redressal Advisory Council-comprised of the AEC Chairperson, BARC Director, AERB Chairperson, and CEA Chairperson-to hear review applications and facilitate conciliation with technical depth. It designates Claims Commissioners within thirty days of a notified incident to adjudicate compensation swiftly, and empowers the Government to constitute a Nuclear Damage Claims Commission for severe cases with quasi judicial powers modeled on civil courts-but guided by natural justice for speed and sensitivity. This is justice engineered for emergencies.

Third, a secure, transparent ecosystem. Restricted information provisions protect sensitive data-about sites, materials, designs-without choking legitimate public outreach on safety. The Government retains exclusive control of enrichment, reprocessing of spent fuel, heavy water production, and isotopic separations; all spent fuel is cooled and ultimately delivered back to Government custody-never handled by private operators-so long term stewardship remains a sovereign function. At the same time, research, design and innovation are exempted from licensing (with safety and national security caveats), so startups and universities can explore prototypes, sensors, AI enabled monitoring, and advanced materials that make reactors safer and radiation uses more precise.

Our journey has also learned from adjacent sectors. When we opened space to private participation five years ago, a fledgling economy grew to $8 billion, with over 300 startups and a trajectory to quintuple within a decade. We expect a similar confidence effect here: alongside SHANTI, we have announced missions for SMRs with Rs 20,000 crore earmarked, and a Rs 1 lakh crore Research, Development and Innovation fund to catalyse private sector across domains. Nuclear energy will not be a solitary silo; it will be a node in India's wider innovation surge.

Some worry about liability and courts; SHANTI is explicit. Operator carries the liability with caps graded by installation, backed by mandatory insurance or financial security; beyond the cap, the Nuclear Liability Fund and, if needed, international supplementary compensation pool can be tapped. Civil courts will not be clogged with technical claims; specialised redressal commission will adjudicate, with appeals routed to the Appellate Tribunal for Electricity (augmented with nuclear technical members) and, ultimately, to the Supreme Court. The intent is not to bypass justice, but to deliver it with speed, expertise and dignity.

And some fear sovereignty might be diluted; the opposite is true. Source and fissile materials remain under Government surveillance and accounting; uranium and thorium mining above notified grades is reserved to Government entities; acquisition rights in sensitive cases vest in the Centre; and emergency powers allow the Government to assume control across facilities and materials if the nation so demands. Sovereignty, safety, and scale reinforce each other.

In the end, a law is only as alive as the people it serves. I picture a small town whose street lights no longer flicker at midnight because a nearby reactor hums steadily; a farmer whose irradiated onions fetch a fairer price after a longer shelf life; a mother watching a linear accelerator calibrate a life saving dose; a young engineer writing an algorithm that catches an anomaly before it becomes an incident. That is the India SHANTI seeks to midwife: Viksit Bharat powered by clean, reliable energy, protected by robust regulation, and propelled by the ingenuity of its citizens. Rivers do not argue their way to the sea; they find it. With SHANTI, India's nuclear river has found its course-safe, sovereign, and generous enough to carry every citizen with it.

(The author is Union Minister of State (Independent Charge) for Science and Technology; Earth Sciences and Minister of State for PMO; Department of Atomic Energy; Department of Space; Personnel, Public Grievances and Pensions)

UN General Assembly Endorses Historic Global Plan on NCDs and Mental Health
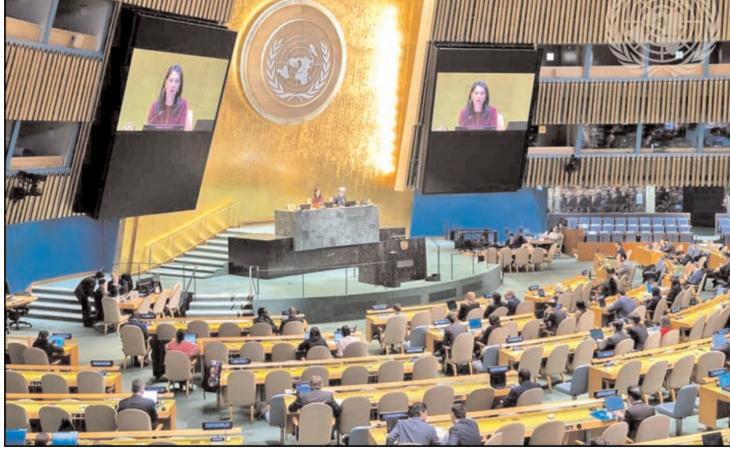
■ MOHAMMAD HANIEF

In a significant milestone for global public health, world leaders gathering at the Eightieth United Nations General Assembly in New York have adopted a historic political declaration that for the first time brings noncommunicable diseases and mental health together under a single, integrated global framework. The declaration, adopted in December 2025 following extensive intergovernmental negotiations, reflects growing international recognition that physical and mental health challenges are deeply interconnected and must be addressed collectively to secure sustainable development, economic stability, and social equity.

The declaration, titled Equity and Integration: Transforming Lives and Livelihoods through Leadership and Action on Noncommunicable Diseases and the Promotion of Mental Health and Well-being, represents the outcome of years of advocacy and policy discussions, culminating in the fourth high-level meeting of the UN General Assembly on the prevention and control of noncommunicable diseases and the promotion of mental health and well-being held earlier in September. It builds on previous global commitments while significantly expanding their scope, ambition, and accountability mechanisms.

Noncommunicable diseases, including cardiovascular diseases, cancers, chronic respiratory illnesses, and diabetes, remain the leading causes of death worldwide. Each year, an estimated 18 million people die prematurely from these conditions, many before reaching the age of 70. At the same time, mental health conditions affect more than one billion people globally, cutting across age, gender, geography, and income levels. Together, these health challenges place enormous strain on health systems, families, and economies, particularly in low-and middle-income countries where access to prevention, diagnosis, and treatment remains uneven.

The declaration acknowledges that many of the drivers of noncommunicable diseases, such as unhealthy diets, tobacco use, harmful alcohol consumption, physical inactivity, and exposure to air pollution, are preventable and closely linked to mental health outcomes. Rapid urbanization, climate change, digital exposure, and social inequalities have further intensified these risks, leading to rising disease burdens in virtually every country. As a result, the declaration frames noncommunicable diseases and mental health not only as medical concerns, but as fundamental development issues with far-reaching social and economic consequences.

One of the most consequential aspects of the declaration is the establishment of specific, time-bound global targets to be achieved by 2030. These targets are designed to accelerate action and measure progress in concrete terms. They include a substantial reduction in tobacco use worldwide, a significant increase in the number of people with controlled hypertension, and a dramatic expansion of access to mental health care. By defining these objectives as fast-track outcomes, the declaration seeks to shift global efforts from broad aspirations to measurable impact.

Beyond outcome targets, the declaration outlines ambitious system-level benchmarks intended to strengthen national capacity to respond effectively to noncommunicable diseases and mental health conditions. These include commitments to enact comprehensive policy, legislative, and regulatory measures; ensure the availability of essential medicines and basic technologies at the primary health care level; expand financial protection to reduce out-of-pocket costs for essential services; implement multisectoral national action plans; and develop robust surveillance and monitoring systems. Together, these measures aim to embed prevention and care within stronger, more resilient health systems.

The declaration is notable for its breadth and inclusivity, reflecting lessons learned from the COVID-19 pandemic and emerging global challenges. For the first time, it explicitly recognizes a wider range of noncommunicable disease areas, including oral health, lung health, childhood cancer, liver and kidney diseases, and rare conditions that have historically received limited policy attention. It also expands the discussion of environmental determinants of health, highlighting the impacts of air pollution, unsafe cooking practices, lead exposure, and hazardous chemicals on both physical and mental well-being.

In response to the rapidly evolving digital landscape, the declaration addresses emerging risks linked to social media use, excessive screen time, exposure to harmful content, and the spread of misinformation. These factors are increasingly understood to influence mental health, particularly among children and adolescents, and to shape behaviors related to diet, physical activity, and substance use. The inclusion of digital harms marks a recognition that modern health challenges extend beyond traditional biomedical boundaries.

Regulatory action features prominently in the declaration, with a sharper focus on controlling tobacco products, including e-cigarettes and novel nicotine delivery systems, as well as restricting the marketing of unhealthy foods to children. Commitments to front-of-pack nutrition labeling and the elimination of industrial trans fats reflect a growing emphasis on creating healthier food environments through evidence-based policy interventions.

Equity lies at the heart of the declaration. It emphasizes the disproportionate burden of noncommunicable diseases and mental health conditions borne by marginalized populations, including people living in poverty, climate-vulnerable communities, Small Island Developing States, and populations affected by humanitarian crises. The text underscores the importance of involving people with lived experience in policy design and implementation, ensuring that responses are informed by real-world needs and grounded in human rights principles.

Financing emerges as a central concern throughout the declaration, particularly in light of global economic pressures that threaten health spending. The document calls for adequate, predictable, and sustained funding through increased domestic investment, enhanced international cooperation, and more coordinated multilateral financing mechanisms. By strengthening financial commitments, the declaration seeks to close persistent gaps between policy ambition and implementation on the ground.

Importantly, the declaration frames action on noncommunicable diseases and mental health as a shared responsibility that extends beyond ministries of health. It advocates for a whole-of-government and whole-of-society approach, recognizing that progress depends on coordinated action across sectors such as education, finance, urban planning, environment, labor, and digital governance. Civil society organizations, youth groups, persons with disabilities, and community leaders are identified as essential partners in driving change and sustaining momentum.

Accountability is a defining feature of the new framework. The declaration reinforces the role of monitoring, reporting, and review processes to track progress and maintain political commitment. The UN Secretary-General is tasked with reporting on advancements toward the 2030 targets ahead of the next high-level meeting, while the World Health Organization and other UN agencies will support countries in translating global commitments into national policies and programs. This emphasis on accountability reflects growing demand for transparency and results in global health governance. As the world looks toward 2030, the adoption of this declaration signals a renewed determination to confront some of the most persistent and complex health challenges of our time. By integrating noncommunicable diseases and mental health within a unified vision, world leaders have acknowledged the inseparable nature of physical, mental, social, and economic well-being. Whether this historic commitment delivers on its promise will depend on sustained political will, adequate financing, and meaningful action at national and local levels. What is clear, however, is that the declaration has set a new benchmark for global cooperation in pursuit of healthier, more equitable societies.

(The author is a senior analyst based in Kashmir)