

# GLOBAL KNOWLEDGE: International Vulture Awareness Day

India stands at a pivotal moment in its history—a nation rich in ancient wisdom and modern potential, poised to transform itself into a global knowledge superpower. With its demographic dividend, rising digital infrastructure, world-class scientific community, and centuries-old tradition of learning, India has the right ingredients to lead the global knowledge economy. However, this ambition demands a clear strategy, robust investment, inclusive policies, and above all, a long-term vision.

India's youth population—over 65% of its people below the age of 35—is both its greatest strength and most pressing challenge. To harness this demographic dividend, the focus must be on quality education, skills development, and entrepreneurial training.

The National Education Policy (NEP) 2020 is a significant step in this direction, aiming to make learning more holistic, flexible, and multidisciplinary. However, its effective implementation across states remains crucial.

An education system that encourages critical thinking, creativity, digital literacy, and research orientation will be the bedrock of a knowledge-driven India. There must also be an emphasis on improving foundational literacy and numeracy, especially in rural and underserved areas, to ensure that no talent goes untapped.

For India to become a true knowledge leader, it must significantly boost investment in research and development (R&D). Currently, India spends less than 1% of its GDP on R&D—a figure that pales in comparison to developed countries. There is an urgent need to encourage public-private partnerships, support university-led research, and create ecosystems that foster innovation, especially in emerging areas like AI, quantum computing, biotechnology, space technology, and clean energy.

The success of missions like Chandrayaan and the rise of Indian startups in deep tech sectors signal strong potential. Yet, this momentum must be sustained by institutional reforms and increased funding.

India's rise as an IT and digital services powerhouse has laid the foundation for its knowledge aspirations. Initiatives like Digital India, BharatNet, and the National Knowledge Network (NKN) are transformative. But to truly democratize knowledge, we must bridge the digital divide. Affordable internet access, especially in rural and tribal areas, is essential for equitable learning and innovation.

E-learning platforms, AI-driven personalized education, and open-source academic content should be expanded, allowing students across the nation to access global-quality resources at their fingertips.

India's historical contributions to mathematics, astronomy, medicine, and philosophy make it a natural leader in the knowledge domain. As the world seeks alternatives to dominant global narratives, India's civilizational wisdom-rooted in Vasudhaiva Kutumbakam (the world is one family)—has the potential to shape ethical and inclusive models of knowledge creation.

Strengthening global academic partnerships, inviting top international universities to set up campuses in India, and encouraging Indian institutions to rise in global rankings are vital. Knowledge diplomacy must be a central pillar of India's foreign policy, positioning Indian expertise as a force for global good.

A true knowledge superpower must be inclusive. This means not only bridging urban-rural and gender divides but also embracing India's linguistic diversity. The promotion of education in regional languages, as proposed in NEP 2020, will empower millions to access and contribute to the knowledge economy without linguistic barriers.

India must also encourage cross-disciplinary knowledge, combining traditional fields like Ayurveda, Yoga, and Sanskrit with modern sciences to create new knowledge paradigms.

As we navigate the 21st century, India's rise as a knowledge superpower is both an opportunity and a responsibility.

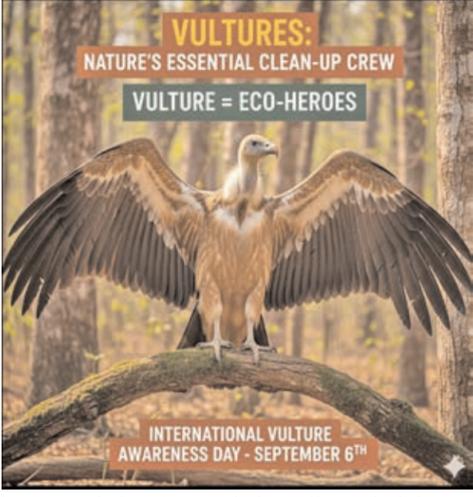
## R.K.BHARDWAJ AND DIVYANSH PANDEY

The first Saturday of September of every year is celebrated as International Vulture Awareness Day worldwide. A global event that brings together conservationists, bird enthusiasts, families, and other organizations to appreciate the role of vultures in the ecosystem. A perfect time to reflect on the critical role these misunderstood birds play in our ecosystem. As a veterinarian and wildlife expert, we have seen at first hand the devastating impact of their declining population and the urgent need for their conservation. Vultures are nature's most efficient sanitation workers, silently and swiftly clearing our landscapes of animal carcasses. This vital service is not just for show; it's a cornerstone of public health and ecological balance.

India is home to nine species of vultures, but unfortunately most of them face the danger of extinction. India's vulture populations have been on a catastrophic decline. The data is alarming. The populations of three of India's most common vulture species have declined rapidly: the white-rumped vulture dropped by a staggering 98%, the Indian vulture by 95%, and the red-headed vulture by 91% according to a nationwide survey by Bombay Natural History Society & Wildlife Institute of India in the early 2000s. The primary culprit was found to be widespread use of a veterinary drug: diclofenac in the livestock. This non-steroidal anti-inflammatory drug (NSAID) was commonly administered to livestock to ease pain and fever. The silent killer lay dormant in the carcasses of treated animals. When vultures scavenged on these remains, they ingested the toxic residue, which led to acute kidney failure resulting in severe visceral gout and a swift, agonizing death.

In response to this ecological crisis, the Indian government took a monumental step by banning the veterinary use of diclofenac in 2006. Since then, other harmful NSAIDs like Ketoprofen and Nimesulide have also been banned later. The ban reduced, but did not eliminate, the usage of diclofenac as only large multi dose vials for veterinary use are being banned but small vials are still available for human use. A small percentage of livestock carcasses (1-5% depending on the State) still contained traces of this deadly drug many years after the ban according to the State of India's Birds report 2023 indicating the ongoing illegal use of banned drug in livestock by the farmers themselves or by some quacks.

The loss of these magnificent birds created a vacuum with grave consequences. The unintentional decimation of these scavenging birds allowed deadly bacteria and infections to proliferate, leading to the deaths of about half a million people over five years, says the study published in the American Economic Association Journal. The economic loss was estimated to be nearly \$70 billion a year. With vultures no longer cleaning up carcasses, dead animals were left to rot, creating a public sanitation crisis. This posed a significant risk of spreading diseases, contaminating soil and water resources, and attracting other opportunistic scavengers. Vultures acts as a natural incinerator. Without them, diseases like anthrax, brucellosis, and tuberculosis can persist in the environment. These diseases can then be transmitted to other animals and, critically, to humans. For example, anthrax spores can remain viable in the soil for decades, posing a long-term risk. Decomposing carcasses release bodily fluids and bacteria that can leach into the soil and groundwater. This contamination can affect local water sources used for drinking and agriculture. The high nutrient load from the decaying matter can also lead to the proliferation of harmful



bacteria and algae in water bodies, affecting both human and animal health. One of the most dangerous consequences was the proliferation of feral dog populations. The population of feral dogs in India increased by at least 5 million, resulting in an estimated 38 million additional dog bites and over 47,000 extra deaths from rabies. Because with an abundance of carcasses, their numbers exploded, leading to an increased risk of rabies transmission, dog-related injuries to humans and risk of other zoonotic diseases like Echinococcosis, Leptospirosis, Toxocarosis, salmonellosis etc for humans and significant increase in the risk of rabies and canine distemper in wild carnivores such as tiger, leopard, lion etc.

In addition to the immediate threat of diclofenac, other environmental factors like climate change and deforestation also pose a significant long-term risk to vulture populations. Heavy metal pollution, emanating from mining of metallic ores, refineries for metals, and thermal power plants, is also known to adversely affect birds. Plastics are coming under increasing scrutiny for causing direct deaths of birds or for their potential (in microplastic form) to affect their physiology and survival. We therefore need to understand 'pollutants' in a broad sense, including pesticides, rodenticides, heavy metals, certain medical drugs, and plastics. Climate change can alter habitats and reduce prey availability, forcing vultures to migrate or face starvation. Deforestation, on the other hand, destroys their nesting sites and roosting areas, which are crucial for breeding and survival. A report by the World Bank estimates 41% of India's forest cover to be in a degraded state, resulting in a possible loss of one-third of its forest productivity. These broader ecological challenges amplify the existing threats and highlight the need for a comprehensive conservation strategy. The WHO references recent studies that estimate that more than 75 per cent of emerging infectious diseases are zoonotic—think COVID-19, Monkey pox virus, Nipah virus, Avian influenza. These diseases, which jump from animals to humans, often arise in areas where ecosystems and habitats have been disrupted by deforestation, Human interference in the wild ecosystem, land-use changes & Human-animal conflicts.

### Solutions for Vulture Conservation

Combating this multifaceted crisis requires a multi-pronged approach involving both authorities and the community.

#### What Authorities Can Do

► Enforce the Ban: The government must ensure a strict and effective enforcement of the ban on diclofenac and other harmful NSAIDs in veterinary practice. Regular monitoring of drug use in livestock and strictly penalizing violators is crucial.

► Promote Safe Alternatives: Authorities should actively promote the use of safe, vulture-friendly alternatives like meloxicam & Tolfenamic acid, by making them more accessible and affordable for farmers and veterinarians.

► Establish Vulture Safe Zones: The creation of designated "Vulture Safe Zones" where the use of harmful drugs is completely eliminated and zone free from Human activities such as mining, Garbage dumping etc. to provides a secure environment for vultures to forage and thrive. These safe zones are intended to be the future release sites for captive-bred birds, ensuring they have a secure environment to thrive in the wild.

► Support Conservation Breeding Centers: Continued funding and support for conservation breeding centers are vital. These centers, like the one in Pinjore, have been instrumental in breeding critically endangered species in captivity and are now preparing to reintroduce them into the wild. Vultures are slow breeders, and therefore in situ conservation measures will need to be supplemented by continued efforts towards ex situ interventions in breeding centres, creating a stock that can be gradually released to supplement wild populations under the right conditions.

#### What We As a Community Can Do

► Awareness and Education: The most powerful tool we have is awareness. We need to educate ourselves, our families, and especially our children about the importance of vultures. We can start by challenging the negative stereotypes associated with these birds and highlighting their role as nature's clean-up crew.

► Responsible Livestock Management: Farmers and livestock owners can play a direct role by ensuring they only use approved, vulture-safe drugs for their animals and by responsibly disposing of carcasses.

► Support Conservation Efforts: Contributing to or volunteering with organizations like the Bombay Natural History Society (BNHS), Nature conservation foundation, Wildlife trust of India, National Biodiversity authority of India and other conservation groups working on vulture protection can make a tangible difference.

#### A New Generation of Vulture Guardians

Engaging children is key to long-term success. By introducing them to the concept of vultures as "super-scavengers" and "eco-heroes" through interactive learning materials and activities, we can foster a new generation of conservationists. Let's make it a mission to teach our kids about the fascinating world of vultures and their indispensable role in maintaining a healthy planet.

Vulture conservation is not just about saving a species; it's about protecting ourselves and our environment. Their role in disease control and maintaining a clean ecosystem is irreplaceable. We must continue to support and advocate for safe alternatives to harmful drugs and raise awareness about the immense value of these incredible birds.

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# Chinese memes, videos & commentaries say Modi overshadowed other leaders at SCO

## SANA HASHMI

The Shanghai Cooperation Organisation summit and Prime Minister Narendra Modi's much-discussed China visit are now behind us. Beyond the usual analysis of geopolitics and bilateral prospects, Chinese social media users seemed more fascinated by body language, optics, symbolic gestures, and inevitably, memes. Some commentary stressed the cordial tone of the visit, but much of it was light-hearted, with a surprising number of jokes aimed at US President Donald Trump.

If the Shanghai Cooperation Organisation (SCO) summit was a diplomatic show, Modi was undoubtedly its leading actor, judging by the sheer amount of online attention he received. "A distant relative is not as good as a close neighbour," remarked Liu Ying, a researcher at the

Chongyang Institute for Financial Studies at Renmin University.

Much chatter centred on the red carpet rolled out for Modi. "The most heartwarming moment of Modi's visit to China was his grand reception. As soon as he arrived, he was greeted with fanfare. The red carpet stretched long, the honour guard stood in perfect formation, and the dance performance was particularly lively," read a commentary on Baidu.

### Modi-Putin hand-holding, car ride

Chinese internet users closely followed every move by Modi, but the real viral moment came from optics: Modi holding hands with Russian President Vladimir Putin in Tianjin, and later sharing a ride in his Aurus Senat limousine. The images lit up platforms such as WeChat and Weibo, sparking hashtags such as #SCO\_Summit\_Modi\_held\_Putin's\_

hand and entered the hall and #Modi\_takes\_Putin's\_car, each attracting millions of views.

"Not only did they enter the venue together, but the two were almost inseparable in the conference hall," wrote one user. Many on Weibo wondered: "How would Trump feel watching this Modi-Putin bonhomie?"

Even Hu Xijin, former editor-in-chief of Global Times, weighed in. Trump might be irked by the public display of camaraderie, he said, further fuelling the meme fire.

Others tried to decode the symbolism. "Modi skipped his official car to ride with Putin in a Russian armoured Aurus sedan. This was not just a commute, it was a carefully staged diplomatic gesture, using proximity and optics to highlight India-Russia closeness," a Weibo post explained.

Another user quipped: "This was a landmark moment in Russia-India relations, shedding new light on multilateral interactions at the SCO."

### Scrutiny of body language

Social media users did not stop at hand-holding jokes. Body language became another focus of online discussion. On Douyin, the Chinese version of TikTok, many videos highlighted how Modi was all smiles and appeared animated and cordial during his China visit. Several focused on his handholding with Putin, splicing in Trump video clips to suggest both an unbreakable bond between India and Russia, and Trump's supposed irritation.

Other videos showed Modi walking confidently, with commentary framing him as "tough" and suggesting India had responded firmly to Trump's tariffs. On Zhihu, the

Chinese version of Quora, one post read: "As friendly as they were before, both Modi and Trump are angry with each other now."

On a video platform called Bilibili, a popular post remarked: "Modi has stolen Trump's spotlight. His Tianjin trip has earned him plenty of attention. If Trump had also come, he would probably have gained quite a following, his dance moves would surely attract fans." There was even an AI-generated video casting Modi and Trump in a Chinese-style aristocratic drama, where Modi was shown taking on Trump and winning.

Not all commentary was flattering. "Modi's enthusiastic response to Putin exposed his weaknesses. A small country is a small country; it is not about size but about composure. The US and the West must be pleased, India will eventually bend to them," read a pop-

ular Weibo post. Yet, such critiques were few and far between. "Modi's visit to China was the happiest he's had in years," said a widely shared counterpoint.

### A rare positive spotlight

Much of the online commentary in China suggested that Modi overshadowed other leaders at the SCO summit and that India's role was shifting. Unusually, many images depicted Modi in a positive light, showing him as standing up to the US, quickly mending ties with China, and reassuring Russia. Such positive portrayals of India have been rare in recent years.

The rationale is simple: The bigger adversary, for now, is the US. Chinese social media seems keen to amplify the India-US rift, celebrate the India-Russia camaraderie, and embrace the perception of stabilising India-China ties.

# State of Good Health is of paramount importance

## TARA CHAND BHAGAT

Through the protocols of hospitality of the columns of your esteemed paper, I would like to highlight the following tips for keeping good health and staying quite healthy. To be slim, fit and healthy one must follow the following chief principles of good health.

Exercise: One of the most important principles for keeping good health is the physical exercise. Exercise is as important as food and air. For the purpose of keeping good health, quality and quantity are very important.

One must get up early in the morning at 5 o'clock going out to be having morning walks daily. After having walked for an half hour one must do some type of physical exercises in the open air that too costs nothing and need not have any infrastructure to do such exercises. Exercises are necessary for both cardio and weight maintenance. Oftenly obesity cases are seen both in the men and women's health. Even children ranging from the age of 10 and above are seen to be obese due to having fond of eating fast food that are quite harmful for stay fit and easily fall a prey to other diseases.

Diet: Other requirement for keeping good health is a proper diet. It is an old saying that health is almost 80% of what one eats and 20% in exercise. One must never skip of one's breakfast. One must include protein in one's diet besides being carbohydrates and minerals etc. Seasonal fruits must be taken daily. Leafy vegetables are never to be avoided by us. Refrain from taking too much sugar as well as salt. They prove to be more harmful to one's health.

Yoga and Meditation: One gets mindful by doing yogic exercise and meditation. Yoga helps us to relax. It also reduces stress, hypertension and increases energy improving one's health's Strength, muscle tone and coordination among all the senses necessary to be developed. One can get closer to the Almighty God by observing yogic principles in one's life increasing longevity.

Spirituality: Besides yogic exercise, meditation too is very necessary to feeling close to God. One must always believe in the Supreme power that is running one's good health and pray to "Him" for happy life and state of good health without the sweet will of the Almighty God. Spirituality makes our thinking very

positive besides being cheerfulness and develops noble attributes and love towards the others.

Sound sleep: Sound sleep is also as important as food, water and air for keeping good health and staying fit and slim-trim in one's lifetime. While its quantity and quality has to be maintained. Most of the adult people need between 7.5 to 8.5 hours of uninterrupted sleep. Going to bed at the same time and getting up at the same time everyday is the greater and more beneficial than to going bed later and rising up later in the morning. Observing the principle of regularity is always good. So try to go to bed only when you are sleepy. Stay away from stimulants like caffeine. This will help you get deep sleep which is most refreshing.

In the concluding lines of my write-up I would like to lay emphasis on the last but not least point that holds greater significance for leading rather living very healthy life is that always abstain from taking too much alcohol, drugs and intoxicants that are responsible for deteriorating one's health, norms and fitness and health regime is affected badly and one may die before reaching old age that is always considered to be worth living.

# CRIMINAL LAW

## ISHER SINGH JASROTHIA

For most people, familiarity with criminal law comes in fragments, from movies, television, and books. But when we become personally involved in the criminal law system, real-life issues come into focus and the need for information and assistance can arise quickly. This overview discusses the basics of criminal law: criminal statutes, criminal law players and procedure, and the potential outcome of a criminal cases. Links to additional introductory information on criminal law are also provided.

### Criminal Laws and Their Sources

When a society and the government decide that certain conduct is dangerous to the society as a whole, such conduct is labelled a "crime" which is made punishable by sanctions such as fines and imprisonment. Most crimes are identified in statutes that have been enacted by federal, state, and local government legislatures, in response to issues that affect the jurisdiction.

Criminal statutes describe the type of conduct that has been deemed a crime, the mindset or intent required, and in some instances, the proper punishment. For example, the following "Burglary" statutes are from the Penal Code:

Section 459 / 331(7) BNS. Every person who enters any house, room, apartment, tenement, shop, warehouse, store, mill, barn, stable, out-

house or other building, tent, vessel, etc. with intent to commit grand or petit larceny or any felony is guilty.

Section 356/134 BNS. Assault or criminal force in attempt to commit theft of property carried by a person

2. Burglary in the second degree: by following in the Jail not exceeding one year or in the state prison.

People who are found to have violated a criminal law - whether through their own admission by a "guilty" plea, or as a result of trial - can be punished through imposition of fines, imprisonment, probation, and community service, among other penalties.

### The Criminal Law System: Players and Procedure

The criminal law "system" encompasses the entire criminal process itself - from investigation and arrest, conviction and sentencing and the people who plays a role in that process: the accused, police officers, prosecuting attorneys, witnesses, probation officers, and corrections officers etc.

At all stages of the criminal process, a person suspected of or charged with a crime is entitled to certain fundamental rights that derive from the Constitution of India and key court decisions. These include the right to an attorney and the right to a speedy trial. These constitutional rights provide a balance between the government's interest in ensuring that criminal behaviour is identified and pun-

ished, and the fundamental need to preserve and promote the individual freedoms that characterize a democratic society.

### The Outcome: How Might a Criminal Case End?

The outcome of any criminal cases depends upon the crime charged, the strength of the evidence, the legal validity of law enforcement and courtroom procedure, and the goals and strategy of the government and defence. When all is said and done, there may be no legal consequence for a person charged with a crime, because the charges are dismissed, or a full-fledged jury trial might result in a criminal conviction.

### Some potential outcomes of a criminal cases are:

1. A criminal investigation sometimes ends with no arrest.
2. An arrest occurs, but the case is dismissed because the police illegally seized the only evidence of crime.
3. A person is arrested and charged with a crime, then enters into a plea bargain with the government, agreeing to pleaded with "not guilty" in exchange for some form of leniency, such as a lighter sentence.
4. A person is brought to trial and found "not guilty," or acquitted, by the Court
5. A person is convicted and sentenced to a long prison term.

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