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SUPREME COURT VERDICT ON HUMAN-ANIMAL CONFLICT

WHY IN THE NEWS?

The Supreme Court issued awarning on Wednesday, highlighting the critical threat posed by humanwildlife conflicts to the preservation of forests and wildlife. Justice B.R. Gavai emphasized the urgent need for striking a delicate balance that safeguards the rights of both humans and animals.

In a pivotal case involving the delineation of boundaries for Assam's Pobitora wildlife sanctuary and the resolution of rights for marginalized communities residing within its confines, the court underscored the imperative of resolving conflicts between humans and animals. It stressed that failure to address these conflicts could lead to the extinction of forests and wildlife.

The court's remarks underscored the pressing need for sustainable solutions that uphold the rights of all stakeholders while ensuring the preservation of precious ecosystems and biodiversity.

DIFFERENT DIMENSIONS OF HUMAN-ANIMAL CONFLICT

ECOLOGICAL DIMENSION:

Habitat Loss and Fragmentation:

One of the primary drivers of human-animal conflict is the loss and fragmentation in the natural habitats. Rapid urbanization, agricultural expansion, and industrial development have encroached upon wildlife habitats, shrinking the available space for animals. Fragmentation disrupts ecological connectivity, isolating populations and increasing their vulnerability to human activities.

Altered Ecological Dynamics:

Human disturbances alter ecological dynamics, leading to shifts in species distribution and behavior. Species like elephants, tigers, and leopards, which require large territories, are particularly affected. Reduced habitat availability forces animals to venture into human settlements for search of food and water, escalating conflicts.

Human-Induced Stress:

Anthropogenic activities such as deforestation, air pollution, and climate change impose stress on wildlife populations. This stress can manifest in altered feeding patterns, increased aggression, and heightened vulnerability to diseases, exacerbating conflict situations.

SOCIO-ECONOMIC DIMENSION:

Livelihood Dependence:

Many communities in rural areas depend on agriculture and livestock rearing for their livelihoods. Crop raiding by wildlife poses a direct threat to their sustenance, leading to resentment and retaliatory killings. Loss of crops or livestock can push already marginalized communities into poverty, perpetuating the cycle of conflict.

Infrastructure Development:

Infrastructure projects like roads, railways, and dams often penetrate wildlife habitats, exacerbating fragmentation. These developments not only directly displace animals but also facilitate human encroachment into previously undisturbed areas, intensifying conflicts.

Urbanization and Land Use Change:

Rapid urbanization leads to the conversion of natural landscapes into urban sprawls and agricultural lands. This transformation not only reduces habitat availability for wildlife but also brings humans and animals into closer proximity, increasing the frequency of encounters and conflicts.

CULTURAL DIMENSION:

Traditional Beliefs and Practices:

In many cultures, animals hold significant cultural and religious value. However, conflicts arise when these revered animals, such as elephants in India, pose threats to human lives and livelihoods. Balancing cultural reverence with practical solutions to mitigate conflicts presents a unique challenge.

Conflict Perception and Attitudes:

Attitudes toward wildlife vary among different communities. While some may view animals as pests or threats, others may hold more positive attitudes and advocate for their conservation. These diverse perceptions influence conflict mitigation strategies and community participation in conservation efforts.

POLICY AND LEGAL FRAMEWORK:

- 1. Wildlife Protection Acts: The Wildlife Protection Act, 1972, provides legal protection to endangered species and regulates activities related to wildlife conservation, hunting, and trade. Amendments to the act have been made over the years to strengthen wildlife protection measures.
- 2. Forest Rights Act: The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, recognizes the rights of forest-dwelling communities over traditional forest lands and empowers them to participate in conservation and management activities.
- 3. Compensation Schemes: State governments have implemented compensation schemes to provide financial relief to farmers and communities affected by crop raiding, livestock depredation, and human injuries or fatalities caused by wildlife.

CONSERVATION INITIATIVES:

- 1. Project Tiger: Launched in 1973, Project Tiger aims to conserve the tiger population and its habitat. It includes measures such as habitat protection, anti-poaching efforts, and community participation in tiger conservation.
- 2. Project Elephant: Initiated in 1992, Project Elephant focuses on the conservation and management of elephant populations and their habitats. It addresses issues such as habitat fragmentation, human-elephant conflict, and elephant corridors.
- 3. Eco-sensitive Zones: The establishment of eco-sensitive zones around protected areas helps to regulate developmental activities and minimize human disturbances in critical wildlife habitats.

COMMUNITY ENGAGEMENT:

- 1. Joint Forest Management: Collaborative forest management initiatives involve local communities in the protection and sustainable use of forest resources. These partnerships promote coexistence between humans and wildlife while improving livelihood opportunities for local communities.
- 2. Awareness and Education: Government agencies, NGOs, and conservation organizations conduct awareness campaigns and educational programs to sensitise communities about wildlife conservation, HAC mitigation measures, and the importance of coexistence.

TECHNOLOGICAL SOLUTIONS:

- 1. Electric Fencing: Electric fencing is used to deter crop raiding by wildlife in agricultural areas. It helps in reducing human-wildlife conflicts by creating physical barriers without causing harm to animals.
- 2. Early Warning Systems: Deploying early warning systems, such as camera traps and sensorbased devices, helps in monitoring wildlife movements and alerting communities about the presence of wildlife in their vicinity, enabling them to take preventive measures.

RESEARCH AND MONITORING:

- 1. Scientific Research: Government agencies, research institutions, and conservation NGOs conduct research on wildlife ecology, behavior, and habitat use to develop evidence-based strategies for HAC mitigation.
- 2. Monitoring Programs: Regular monitoring of wildlife populations, habitat status, and conflict incidents helps in assessing the effectiveness of conservation measures and identifying areas for intervention.

CONCLUSION:

The Government of India has recognized the importance of addressing the human-animal conflict and has taken several steps to mitigate its impacts through policy interventions, conservation initiatives, community engagement, and technological solutions. However, the challenge remains dynamic and complex, requiring continuous efforts and collaboration between government agencies, local communities, NGOs, and other stakeholders to achieve sustainable coexistence between humans and wildlife.

Ankit Kumar

ORGAN TRANSPLANTATIONS RULES IN INDIA

THIS ARTICLE COVERS 'DAILY CURRENT AFFAIRS' AND THE TOPIC DETAILS OF **"ORGAN TRANSPLANTATIONS RULES IN INDIA"**. THIS TOPIC IS RELEVANT IN THE **"POLITY and GOVERNANCE**" SECTION OF THE UPSC CSE EXAM

Why in the News?

Recently, the central government has issued a set of instructions to the states regarding NOTTO (National Organ and Tissue Transplantation Organisation).

The Ministry of Health and Family Welfare amended the national guidelines for organ transplantation to permit individuals aged 65 and above to register for receiving an organ for transplantation from deceased donors.

ABOUT THE RECENT GUIDELINES ISSUED BY THE CENTRAL GOVERNMENT

- The updated guidelines have eliminated the age restriction of 65 years for patients seeking organs from deceased donors. Additionally, there has never been an age limit for living donor transplants, where family members donate organs such as kidneys and livers.
- **NOTTO ID Generation:** The instructions aim to ensure the generation of a NOTTO(National Organ and Tissue Transplant Organization) ID for both the donor and recipient in both living-donor and deceased-donor transplant scenarios.
- **Compulsory Swift Identification:** While a NOTTO ID is obligatory for the allocation of organs in deceased-donor transplants, it should also be promptly generated within a maximum of 48 hours after the transplant surgery for living-donor transplants.
- **Inquiry and Oversight:** The Union Ministry of Health has directed state authorities to investigate instances of organ commercialization and take appropriate actions against any violations found. State governments are tasked with devising a system for regularly inspecting all transplant and retrieval centres.
- Addressing the Emergence of Commercial Trading: Organs from deceased donors are allocated anonymously to individuals awaiting transplants, whereas organs from living donors can only be donated if there is a close familial or emotional bond between the donor and recipient and if the donation is purely altruistic. The commercial trading of organs is strictly prohibited under Indian laws.

ABOUT NATIONAL ORGAN AND TISSUE TRANSPLANT ORGANIZATION

- **The National Organ and Tissue Transplant Organization (NOTTO)** is established at the national level under the Directorate General of Health Services, Ministry of Health and Family Welfare.
- It serves as the primary centre for coordinating and networking nationwide activities related to the procurement and distribution of organs and tissues, as well as maintaining a registry of organ and tissue donation and transplantation across the country.

ORGAN TRANSPLANTATION STATISTICS IN INDIA

According to the **National Organ Transplant Coordination Centre (NOTCC)**, from 2010-2020, India witnessed 11096 total organ transplants out of which 7927 were kidney transplants, 3065 were liver

transplants, 1438 lung transplants, 365 heart transplants, 232 pancreas transplants, 99 cornea transplants, 56 bone marrow transplants, 9 intestinal transplants, and 41 spleen transplants.

India ranks 7th worldwide regarding the number of living organ donors per million population. Between 2000-2020, the rate of increase in deceased donor organ transplants was 101%, whereas the rate of increase in living donor transplants during the same period was 93%.

The leading five states—Telangana, Tamil Nadu, Maharashtra, Gujarat, and Karnataka—comprise over 85% of the total organ transplantations.



Issues related to Organ transplantation in India

- **False NoCs Allegations:** The allegations of fake NoCs (Non-Compensation Certificates) issued by Indian authorities to Bangladeshi citizens involved in organ transplantation raise serious concerns regarding regulation compliance. It implies that people might be motivated to donate organs illegally or under duress due to monetary incentives offered abroad, thereby compromising ethics and safety standards.
- **Kidney Donation Scams:** Reports of impoverished individuals from Myanmar who were allegedly compensated for donating kidneys in Delhi highlight another aspect of organ transplant fraud. This indicates that vulnerable populations may fall prey to illegal international kidney trade networks.
- **Lack of Transparency:** Inadequate transparency around organ donation and transplantation activities often leads to confusion and mistrust among donors, recipients, and society.

• Legal and Ethical Challenges:

- Organ trafficking and commercialization: Despite strict laws against organ trafficking, instances of illegal organ trade still occur, driven by poverty, lack of awareness, and demand-supply gaps.
- Inadequate regulation: Enforcement of regulations governing organ transplantation, including donor screening, consent procedures, and transplant center accreditation, is inconsistent across states, leading to potential exploitation and malpractice.
- Donor Shortage:
- Lack of awareness: Many people are unaware of the importance of organ donation, and cultural or religious beliefs may discourage donation.
- Reluctance among families: Even if individuals are willing to donate, their families may oppose the decision due to misconceptions or emotional barriers.
- Limited deceased donation infrastructure: India has a low rate of deceased organ donation due to insufficient infrastructure, including a shortage of trained transplant coordinators, inadequate organ retrieval facilities, and logistical challenges in transporting organs.
- Infrastructure and Resources constraints:

- Regional disparities: Access to transplant centres and organ procurement facilities varies greatly across regions, with urban areas having better infrastructure than rural areas.
- High costs: Organ transplantation is expensive, making it inaccessible to many due to a lack of insurance coverage or financial resources.
- Lack of Public Awareness and Education: There is a need for comprehensive public awareness campaigns to dispel myths and misconceptions surrounding organ donation and transplantation.

Initiatives taken by India

Legislation:

- 1994 the Indian government enacted **The Transplantation of Human Organs Act (THOA)**.
- **The Transplantation of Human Organs Rules** followed in 1995 and underwent the last amendment in 2014, expanding the scope of donation to include tissues for transplantation. This act criminalized organ commercialization and legalized the concept of brain death in India, enabling deceased donation by procuring organs from brain stem-dead individuals.

Institution:

• **The National Organ and Tissue Transplant Organization (NOTTO)** is established at the national level under the Ministry of Health and Family Welfare. In addition to formulating policy guidelines and protocols for various functions, NOTTO coordinates all activities related to organ donation at the national level.

Way forward for India

- **Strengthen Legislation:** Establishing robust legislation and implementation frameworks governing organ donation and transplantation practice could mitigate many existing loopholes allowing illegal organ trading.
- **Raise Awareness:** Conduct continuous educational drives targeting communities, especially disadvantaged sections of society, explaining the advantages of organ donation. Encourage media outlets to participate actively in spreading awareness using different platforms and modes, making sure everyone knows what is acceptable when it comes to organ donation and transplantation practices
- **Robust Medical Facilities and Training Programs:** Building quality medical facilities equipped with state-of-the-art technologies and training skilled doctors and nurses dealing specifically with organ transplant surgeries could significantly reduce mortality rates and complications associated with organ transplant surgery.
- **Financial Assistance Mechanisms:** Develop comprehensive financial assistance programs catering specifically to the poor segments of society who want to undergo critical medical treatment, including organ transplant operations.
- International Collaboration: Sharing best practices and technological advancements with countries known for their successful organ transplant management systems can prove beneficial. India ought to consider implementing the Spanish "presumed consent" model, wherein individuals are presumed to consent to organ donation upon death unless they have explicitly opted out during their lifetime.

Prelims based Question

Q1. Consider the following statements:

- 1. Telangana, Tamil Nadu, Maharashtra, Gujarat, and Karnataka—comprise over 85% of the total organ transplantations.
- 2. Spain is the biggest country in terms of organ transplantations.

Choose the correct answer using the codes given below:

- 1. 1 Only
- 2. 2 Only
- $3. \quad Both \ 1 \ and \ 2 \\$
- 4. Neither 1 nor 2

ANSWER: C

Mains based Question

Q1.How have legislative measures such as The Transplantation of Human Organs Act (THOA) and the establishment of institutions like the National Organ and Tissue Transplant Organization (NOTTO) impacted India's organ donation and transplantation practices?

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