

**DAILY
CURRENT
AFFAIRS
ANALYSIS**



LAKSHYA ACADEMY®

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1 - Makali beru:

GS III

Environmental Conservation related issues

- **Context:**
- The wonder root known as "makali beru" is about to emerge from the woods, just before it goes extinct.
- **Important information**
- Due to illicit harvesting in the forests of the Male Mahadeshwara Hills (MM Hills) wildlife division in Chamarajanagar, makali beru, also known as swallow root, which is highly valuable medicinally, was in danger of going extinct.
- It only exists in Peninsular India.
- Both the pickle industry and Ayurvedic medicine make extensive use of the root.
- Formerly, the Cauvery basin's MM Hills, BR Hills, Bannerghatta, and other areas were home to large concentrations of "makali beru."
- According to studies, it has insecticidal activity and may be useful in the management of pests associated with stored grains.
- **Source** → *The Hindu*

2 – Kawach System:

GS II

Indian Railways

- **Context:**

- The installation of Traffic Collision Avoidance Systems (TCAS) - Kavach could have prevented the fatal collision between two passenger trains in the Vizianagaram district of Andhra Pradesh, southern India.

- **TCAS - Kavach: What is it?**

- An anti-collision train control system called Kavach is used for cab signalling.
- It functions as the current signalling system's watchdog.
- The Indian Railways Research Designs and Standards Organisation (RDSO) spent ten years developing it, beginning in 2012.
- In the event that the loco pilot misses the "red signal" and overshoots the signal rather than stopping, Kavach is intended to alert him.
- If the pilot does not slow down to less than 15 km/h, the Kavach system will automatically apply brakes to bring the train to a stop, triggering warnings on the locopilot's display.

- **The Kavach system: How is it implemented?**

- The Kavach setup consists of three parts that are supplied to the train stations along the route where this technology is authorised for use.
- The tracks are equipped with radio frequency identification (RFID) technology.
- RFID technology identifies individuals or items via radio waves.
- Without requiring a line of sight or physical contact, it uses electromagnetic fields to automatically identify and read data from a wireless device at a distance.
- RFID scanners, a computer, and brake interface hardware are located in the driver's cabin.

- **Radio-related infrastructure:**

- At train stations, towers and modems are installed.

- **How is the Kavach infrastructure operated?**

- The three parts of Kavach—located at railway stations, on rail tracks and in locomotives—communicate with one another to track train movements and provide engines advance warnings.

- Haze and mountainous terrain are examples of visual interferences that have no effect on their functionality.
- Direct connection between locos allows information about location and track IDs to be shared in the event that it is noticed that both trains are on the same line.
- The locomotives are equipped with antennae that may communicate with railway station towers in order to convey warnings to the driver on his monitor.

- **Price of the Kavach system:**

- For the Indian Railways, deploying Kavach costs ₹50 lakh per kilometre.
- The current Kavach coverage is limited to 1,500 km, and given that Railways has 68,000 km of total route length, it may take several years to ensure Kavach even on high-density routes.
- Presently, the Indian Railways has budgeted ₹4,000 crore for signalling and telecom, of which ₹2,000 crore is allocated to the Rashtriya Rail Sanraksha Kosh (RRSK) fund, which is responsible for implementing Kavach.
- Fund allocation for Kavach for FY23–24 may be approximately ₹1,500 crore based on this RRSK head.
- This suggests that the amount of installation we can do this year may only be between 2,500 and 3,000 km.

- *Source → The Hindu*

3 – Provisions of Domestic Violence Act for Trans Women:

GS II

Government Policies and Interventions

- **Context:**

- The Supreme Court decided to investigate whether a transgender woman who had sex-reassignment surgery qualified as a "aggrieved person" for the purposes of Domestic Violence Act of 2005, Section 2(a).

- **Important information:**

- **"Aggrieved person" defined as:**

- any woman who is or was in a domestic partnership with the respondent who claims to have experienced any form of abuse at the hands of the respondent.

- **What is meant by a domestic partnership?**
- **When two people are linked by any of the following and now reside together in a shared household, then that relationship is defined as follows:**
 - relatedness,
 - a marriage,
 - by means of a partnership akin to marriage,
 - embrace
 - are members of a family living together as a single unit.
- **The Act's goal is:**
 - The purpose of the passage of the 2005 Act was to enhance the efficacy of safeguarding the constitutionally given rights of women.
 - According to the Act, the respondent may, upon the Magistrate's order, provide monetary relief to an individual who has been wronged.
 - The aggrieved individual receives this financial compensation to cover the costs and damages they received as a result of the domestic abuse.
- **Presently, the case:**
 - A trans woman who had sex reassignment surgery in 2016 filed a DV Act plea in the current case, requesting interim maintenance.
 - She claimed that because they had changed their gender from transgender to female, they qualified as "aggrieved people" and requested temporary maintenance.
- **The procedure by which a transgender person changes their gender:**
 - The 2019 Act permits transgender people's identities to be acknowledged.
 - In line with the terms of this Act, it states that transgender individuals have the right to self-perceived gender identity as well as the right to recognition as such.
 - According to the Act, transgender people can also apply in person to the District Magistrate to have a certificate of identification issued to them. This certificate must be supported by the required paperwork and follow the format and guidelines.
 - The transgender person may apply to change their gender after receiving a certificate of identity, following the procedure described in Section 7.
 - According to Section 7, following a surgical gender change, a transgender person may apply for a "revised certificate" from the DM with a certificate from the Chief Medical Officer or Medical Superintendent of the hospital where the procedure was performed attesting to their gender identity.

- The trans person is allowed to modify their birth certificate's first name and all other official documents pertaining to their identity after obtaining this certificate.
- In the current instance, however, the transwoman simply provided her medical certificate as proof that she had undergone sex reassignment surgery before to the HC.

- **Bombay High Court decision:**

- Despite the DV Act's gender-neutral definition of "domestic relationship," it was stated that the word "woman" was used in Section 2(a) to identify a "aggrieved person."
- But when interpreting the term "woman," the court said in a more expansive manner.
- The court finds no legal or other barriers to providing appropriate recognition to the gender identity based on the reassign sex after undergoing SRS where sex reassignment is allowed by medical ethics and there is no legal embargo.
- The court ruled that the word "aggrieved person" should be construed as broadly as feasible.

- **What is meant by domestic abuse?**

- Domestic abuse is characterised as a pattern of behaviour in any relationship that is intended to obtain or keep control over an intimate partner. It is sometimes referred to as "domestic violence" or "intimate partner violence."

- **Violence of this kind might take many different forms:**

- Physical mistreatment.
- Sexual mistreatment
- Abuse of the mind and voice
- Abuse of the economy
- not giving the woman or her kids enough money to live
- not giving out clothes, food, or medication. and so forth
- pushing the woman out the house.
- Without making rent payments on a rental property,
- Stridhan or any other valuables being sold or pawned without permission or notification.
- removing money, income, or a salary forcibly, etc. failing to pay other expenses, such electricity, etc.

- **Benefits under the Act:**

- All women, whether they are mothers, sisters, wives, widows, or cohabiting partners, are covered by the Act.
- The connection could be one of adoption or marriage.
- Furthermore covered are the relationships among family members who cohabit as a combined family.

- It is not possible for a female partner or the husband's female relative to lodge a complaint against the wife or the female partner.
- **It is possible to make a complaint against:**
 - Any male adult participant who has had a domestic relationship with the female
 - spouse's or male partner's relatives
 - the male partner's male and female relations
- **Home Incident Report (HIR):**
 - As required by the Domestic Violence Act, a DIR must be prepared and submitted to the magistrate by the Protection Officer or the Service Provider upon receiving a complaint of domestic abuse.
- **Attacks on the Act:**
- **Solely of a civil nature:**
 - The criminal portion of the statute only applies when domestic abuse is coupled with another violation, such as violating a court-issued protection order.
- **What a protection officer does:**
 - According to the Act, a Protection Officer—selected by the State Government—is in charge of carrying out the Act's provisions in an effective manner.
 - The primary responsibilities of this type of officer are to support the court, take action on behalf of the harmed party, and handle the victim's needs for services such as counselling, medical attention, legal assistance, etc.
 - Those appointed under the Act, however, are not full-time employees in reality.
 - The majority of the time, those who are currently receiving government assistance are charged more for this responsibility.
 - Most of these individuals are not suitable for this position.
- **Not without gender:**
 - This law presupposes that domestic abuse is only committed by men.
 - This rule therefore discriminates against men and breaches Articles 14 and 15 of the Indian Constitution by limiting the number of people who can make a complaint regarding domestic violence to women.

- **Broad meaning:**
- Additionally, others contend that the definition of domestic violence is overly liberal and permits crafty women to trouble men for no apparent reason.
- **Path Ahead:**
- **Legislation based on gender:**
- It is crucial to pass laws, uphold them, and create policies that advance gender equality by removing prejudice against women in marriage, child custody and divorce proceedings, inheritance rules, and asset ownership.
- **Accomplishment of Finances:**
- expanding the opportunities for women to work for pay.
- **Observation:**
- Enhance the method used to gather data from criminal surveillance about violence against women.
- **Education:**
- enhancing the abilities of service providers and law enforcement officials to deal with situations of violence against women through training.
- **Male-Mediated Projects:**
- Make sure men are involved in developing the abuser programme.
- **Avert more acts of violence:**
- By recognising victims of abuse in their early stages and offering the proper assistance and referrals,
- **Gender norms that are equal:**
- Encourage the teaching of egalitarian gender norms as part of comprehensive sexuality education curriculum and life skills programmes for youth.

- **Gender-specific surveys:**
- Utilise population-based surveys to gather data on the scope and effectiveness of the issue, or include data on violence against women into population-based health and demographic surveys, surveillance programmes, and health information systems.
- *Source → The Hindu*

4 – Details of Snake Venom:

GS III

Environmental Conservation related issues

- **Context:**
- The G police have arrested a reality TV show winner and YouTuber in connection with the sale of snake venom at rave parties in the National Capital Region.
- **Important information:**
- The police claim that they took 20 millilitres of snake venom, five cobras, a python, two two-headed snakes, and a rat snake from the defendant.
- A common recreational drug is snake venom.
- Smuggling is an illegal industry worth millions of dollars.
- The recreational use of snake venom, however, has not been the subject of considerable scientific research.
- **How is venom from snakes consumed?**
- Snakes were purposefully made to bite the consumer's tongue or foot in the documented examples of snake venom use in India.
- The most popular snakes utilised for this were Indian kraits and cobras.
- **What effects does snake venom have on the human body?**
- The snake bite was linked to jerky bodily movements, blurred eyesight, and a "blackout"—a state of being unresponsive.
- But for three to four weeks following awakening, a person has an elevated level of arousal and well-being.

- The victim started to feel irritated, lethargic, and drug-craved when the bite's effects subsided.
- Consumers in the cases that were recorded related the sensation of a snake bite to feelings of euphoria, grandiosity, and extreme tiredness.
- Customers didn't report experiencing any withdrawal symptoms, but in some situations, they started to grow more tolerant and went on more frequent snake bite excursions.
- **What causes the high from snake venom?**
- It might be related to the neurotoxic properties of snake venom, which result in analgesia, or the absence of pain perception.
- Forms of a neurotoxin present in cobra venom, in particular, bind on nicotinic acetylcholine receptors (nAChRs), which are linked in the rewarding or euphoric feeling and are broadly dispersed in the human brain area, according to the study.
- The venom releases active metabolites, like as serotonin, into the bloodstream of humans, which can have a variety of psychotropic effects, including tranquil and hypnotic ones.
- **What makes the recreational use of snake venom dangerous?**
- According to the 2018 study, no deaths occurred in the documented occurrences because the victims ingested insufficient amounts of venom.
- It's unclear, though, just what kind of venom can kill a person.
- According to specialists, using snake venom recreationally can therefore result in addiction and even death.
- *Source → The Hindu*

5 – National Security Strategy:

GS III

Internal Security

- **Context:**
- Following years of discussions within the military and strategic community, India has initiated the process of implementing a National Security Strategy.

- **Important information:**

- Before submitting the draught of the plan to the cabinet for final approval, the National Security Council Secretariat (NSCS) is gathering input from a number of Central ministries and departments.
- India is releasing a plan of this kind for the first time.

- **National Security Strategies: What Are They?**

- The goals of the nation's security and the measures to be taken to accomplish them are described in a National Security Strategy document.
- In addition to defining conventional and non-traditional risks and opportunities, it also introduces agency accountability for carrying out these duties.
- In addition to guiding important defence and security changes with strategic ramifications, it would offer a comprehensive picture of the country's overall security, the challenges it faces, and the best course of action for addressing them.

- **It is probable that it will encompass all of the more recent difficulties and contemporary dangers that India faces, including unconventional ones like:**

- security of finances and economy
- security of food and energy
- warfare using information
- India's vital information infrastructure has flaws
- people connected to the environment and supply chains

- **Which nations possess national security strategies?**

- The majority of industrialised nations with sophisticated armed forces and security systems have a National Security Strategy that is periodically revised.
- National security strategies have been released by the US, the UK, and Russia.
- China has a similar policy in place that is directly related to their government structure and is known as the Comprehensive National Security Policy.
- Pakistan has also released a National Security Policy 2022-2026 that outlines its top priorities and national security goals.

- **The National Security Strategy that India Needs:**
- **Essential to the aversion to threat:**
- Evolving geopolitical tensions have made uncertainty more pervasive, making it imperative to develop a national security policy due to the complexity of the numerous classic and non-traditional threats.
- The operational instruction of the Defence Minister has been revised.
- Raksha Mantri's 2009 Operational Directive is the only political directive currently in effect for the Armed Forces.
- It should be updated because it is out of date.
- **Required for reforms in the military:**
- A national security policy ought to be the natural outcome of significant military reforms.
- Developing a national security plan was a prerequisite for proceeding with the theaterization process.
- *Source → The Hindu*



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