



## **DAILY CURRENT AFFAIRS 27-07-2024**

### **GS-1**

1. Kalarippayattu

### **GS-2**

2. States have unlimited right to tax mineral rich lands: SC

### **GS-3**

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4. India's illegal coal mining problem
5. White category sector

## **Kalarippayattu**

**Syllabus: GS-1; Art & Culture**

### **Context**

- **The Ministry of Youth Affairs & Sports** has recognized the Kalarippayattu Federation of India for its efforts in promoting the traditional martial art of Kalarippayattu within the country.



### **About**

- Kalaripayattu is an **ancient Indian martial art** form that originated in Kerala, India. It is considered one of the oldest surviving combat systems in the world.

### **History of Kalaripayattu**

- The origins of Kalaripayattu are shrouded in myth and legend, dating back thousands of years.
- It's believed to have evolved from the martial arts of ancient India, with strong influences from the region of Kerala.
  - **Mythological roots:** Many stories link Kalaripayattu to the epic Mahabharata and the divine characters like Krishna and Arjuna.

- **Traditional healing systems:** *Closely connected to Ayurveda, the traditional Indian medicine system, for its focus on body healing and rejuvenation.*
- **Royal patronage:** *Kalaripayattu thrived under the patronage of Kerala's royal families, leading to its refinement and preservation.*

### Techniques of Kalaripayattu

*Kalaripayattu is a comprehensive martial art encompassing:*

- **Empty-hand combat (Melizhwaram):** *Focusing on strikes, blocks, grappling, and joint locks.*
- **Weaponry:** *A wide array of weapons including the sword (Vayumuthi), staff (Urumi), mace (Kottu), and dagger (Katari).*
- **Healing and massage (Chikitsa):** *Body conditioning and injury prevention are crucial aspects.*
- *A unique feature of Kalaripayattu is its emphasis on **footwork (Adavu)**, which forms the foundation of all movements.*

### Key Features:

*Combines martial arts, philosophy, and healing: Kalaripayattu is not just about fighting; it encompasses physical, mental, and spiritual disciplines.*

- **Emphasis on body conditioning:** *Extensive body massage and physical training are integral parts of the practice.*
- **Diverse techniques:** *Includes empty-hand combat, weapon training (sword, staff, mace, etc.), and healing methods.*
- **Rich cultural heritage:** *Deeply rooted in Kerala's history and mythology.*

### Significance

- **Preservation of Indian heritage:** *Kalaripayattu is a living testament to India's rich martial traditions.*
- **Physical and mental well-being:** *Regular practice offers numerous health benefits.*
- **Global recognition:** *Increasing popularity worldwide as a unique and effective martial art.*

## **States have unlimited right to tax mineral rich lands: SC**

**Syllabus: GS-2: Center-State relations and Judiciary.**

**Context:**

- *States have unlimited right to tax mineral-rich lands: Supreme Court.*

**More about Judgement:**

- *States have the power to tax mining lands and quarries without limitation from the Centre's Mines and Minerals (Development and Regulation) Act (MMDR Act) of 1957.*

**Context of the Case:**

- **Origin:** *Dispute between India Cement Ltd. and Tamil Nadu Government over additional cess imposed on royalty.*
- **Previous Ruling:** *A seven-judge Bench ruled in favor of India Cement in 1989, supporting the Centre's regulatory authority under the MMDR Act.*
- **Current Case:** *Over 80 petitions challenged the previous ruling, leading to this nine-judge Bench decision.*

**Constitutional Basis:**

- **Article 246 & Entry 49:** *States derive the power to tax mines and quarries from the State List of the Seventh Schedule of the Constitution.*
- **Entry 50 vs. Entry 49:** *Chief Justice Chandrachud clarified that Entries 50 and 49 address different subjects and do not influence each other. Entry 50 does not allow Parliament to impose limitations on State taxation under Entry 49.*

**Parliamentary Authority:**

- **MMDR Act Limitations:** *The Parliament cannot limit State legislative power regarding the taxation of mining lands and quarries through the MMDR Act.*
- **Entry 54 (Union List):** *The Union List entry on mines and minerals development is general and does not override State taxation powers.*

**Royalty vs. Tax:**

- **Definition:** *Royalty is a contractual consideration paid for mineral rights, not a tax.*
- **Tax Dependency:** *State taxes depend on the "yield" of the mineral-bearing land, not on the royalty paid.*

## **Ketamine**

### **Syllabus: GS-3: General Science - Medicines**

#### **Context:**

- *Reports have suggested that tablets that release **ketamine slowly can improve symptoms of depression** with fewer side effects.*

#### **Overview**

- *New extended-release ketamine tablet shows promise in easing treatment-resistant depression.*
- *Offers an **alternative to clinic-based** treatments.*

#### **Ketamine Background**

- ***Originally an anesthetic;** blocks glutamate receptors, leading to rapid antidepressant effects.*
- *Traditionally administered **intravenously** or via intranasal spray.*

#### **Current Challenges**

- *Intravenous and nasal administration **can cause side effects:** headache, nausea, drowsiness, increased blood pressure, loss of focus, dissociation.*
- *In-clinic administration **requires monitoring**, making treatment inconvenient.*

#### **Extended-Release Tablet**

- *Researchers, led by Paul Glue, developed R-107, an extended-release ketamine tablet.*
- *Designed for slow release over 10 hours, minimizing side effects.*

#### **Advantages**

- ***Convenience:** Home administration; fewer clinic visits.*
- ***Cost:** Tablet costs about Rs. 20, significantly cheaper than intravenous or nasal treatments.*

#### **Concerns**

- ***Study Limitations:** Enrichment phase may skew results; further studies needed with broader populations.*
- ***Abuse Risk:** Ketamine's potential for abuse; R-107 designed to be shatter-proof to prevent misuse.*

- **Overdose Risk:** *Potential for self-dosing; rationing tablets might be a solution but could negate the convenience.*

## **India's illegal coal mining problem**

**Syllabus: GS-3: Mining related disasters.**

**Context:**

- *The story so far: On July 13, three workers died of asphyxiation inside an illegal coal mine in Gujarat's Surendranagar district.*

**Past Incidents:**

- *June 2023: Mine collapse in Dhanbad, Jharkhand; three fatalities, including a child*
- *October 2023: Mine collapse in Paschim Bardhaman, West Bengal; three fatalities*
- *Pattern: Frequent fatalities in illegal coal mining operations across India*

**Legal and Regulatory Context**

**Coal Nationalisation:**

- **Phases:**
  - *Coking coal: 1971-72*
  - *Non-coking coal: 1973*
- **Legislation:** *Coal Mines (Nationalisation) Act, 1973*

**Regulatory Challenges:**

- **Jurisdiction:** *Illegal mining is a state responsibility; enforcement varies by state*
- **Complex Legal Framework:** *Contributes to bureaucratic inefficiency*

**Factors Contributing to Illegal Mining**

**Demand and Supply:**

- **Coal Dependency:** *55% of India's energy needs*
- **High Demand:** *Leads to a shortfall in legal supply and prompts illegal mining*

**Socioeconomic Factors:**

- **Poverty and Unemployment:** *Poor communities near coal-rich areas often engage in illegal mining*
- **Remote Areas:** *Weak enforcement and monitoring*

#### **Criminal Elements:**

- **Coal Mafias:** *Alleged organized crime involvement*
- **Political Allegations:** *Claims of political support and collusion (e.g., Assam Jatiya Parishad allegations)*

#### **Mining Techniques:**

- **Methods:** *Surface mining, rat-hole mining*
- **Risks:** *Lack of safety equipment, rudimentary techniques, and high profits from minimal operational costs*

#### **Worker Safety and Fatalities**

##### **Primary Causes of Death:**

- **Safety Equipment:** *Absence of helmets, masks, and proper gear*
- **Toxic Exposure:** *Carbon monoxide poisoning, coal dust inhalation, toxic substances like lead and mercury*
- **Structural Hazards:** *Lack of proper support, risks of cave-ins, landslides, and explosions*
- **Training:** *Lack of proper training and emergency response facilities*
- **Negligence and Exploitation:** *Operator negligence and worker exploitation*

#### **Government Response and Challenges**

##### **Regulatory Issues:**

- **Parliamentary Questions:** *Shift of responsibility to State governments*
- **Economic and Social Impact:** *Local economies depend on mining; illegal operations often replace official ones*
- **Complexity:** *Legal and regulatory complexity leads to inefficiency and bureaucratic hurdles*

## **White category sector**

## Syllabus: GS-3; Environment Pollution

### Context

- *Those industries which are practically non-polluting and categorised under the 'white category' by the **Central Pollution Control Board** will now not require prior permission of the state pollution control boards to establish and operate under the **Air Act, 1981 and Water Act, 1974**, according to two separate draft notifications of the Environment Ministry.*

### About

- *White category industries are those that have been classified as practically **non-polluting**.*
- *This categorization was introduced by the Indian government to streamline the environmental clearance process and promote sustainable industrial growth.*

### Key Characteristics of White Category Industries

- **Minimal environmental impact:** *These industries generate negligible pollution, both in terms of air and water.*
- **Reduced regulatory burden:** *Due to their low pollution levels, white category industries are exempt from obtaining a Consent to Operate. A simple intimation to the concerned State Pollution Control Board (SPCB) or Pollution Control Committee (PCC) is sufficient.*
- **Ease of doing business:** *The simplified regulatory framework promotes investments and growth in these sectors.*

### Examples of White Category Industries

*A wide range of industries fall under this category, including:*

- **Manufacturing:** *Biscuit trays, cotton and woolen hosiery (dry process), electric lamps and CFLs (assembly only), scientific instruments, etc.*
- **Energy:** *Solar power, wind power, mini hydro power (less than 25 MW).*
- **Others:** *Air coolers and conditioners, bicycles, waste paper bailing, bio-fertilizers, compressed oxygen gas, etc.*

### Benefits of White Category Classification

- **Environmental protection:** *Encourages industries to adopt cleaner technologies and practices.*
- **Economic growth:** *Simplifies the regulatory process, attracting investments and creating jobs.*



- **Sustainable development:** *Promotes a balance between economic growth and environmental conservation.*