



DAILY CURRENT AFFAIRS 09-01-2026

Mapping Perspective

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Prelims Perspective

2. Nagauri Ashwagandha
3. Bio-Bitumen

Mains Perspective

4. The Right to Disconnect in an “Always-On” Economy
5. Open Network for Digital Commerce

Socotra Island

Syllabus: GS-1; Geography-Mapping

Context

Tourists were stranded on Socotra Island after flights were grounded due to clashes in mainland Yemen.



About Socotra Island

- Located in the **Indian Ocean**, ~340 km southeast of Yemen.
- Area: ~3,600 sq km.
- Interior dominated by **Hajhir Mountains**.
- Broke from Arabian Peninsula ~80 million years ago.
- Nicknamed “**Galápagos of the Indian Ocean.**”
- UNESCO World Heritage Site (2008).

Biodiversity

- 37% endemic plant species
- 90% endemic reptiles
- 95% endemic land snails



Nagauri Ashwagandha

Syllabus: GS-3; Agriculture- Intellectual Property Rights

Context

The Centre has granted a **Geographical Indication (GI) tag** to *Nagauri Ashwagandha*.



About Nagauri Ashwagandha

- Cultivated mainly in **Nagaur district, Rajasthan**.
- Dry climate and sandy soil are ideal for its growth.
- Features long, thick, brittle, starchy roots rich in alkaloids.
- Dark bright red berries indicate superior quality.

- Considered the **finest Ashwagandha variety in arid regions**.

Ashwagandha: Key Facts

- Botanical name: *Withania somnifera*
- Also called **Indian ginseng / Indian winter cherry**
- Important medicinal plant in Ayurveda.

Climatic Requirements

- Region: Dry and sub-tropical
- Soil: Sandy loam/light red soil (pH 7.5–8.0)
- Rainfall: 500–750 mm
- Temperature: 20°C–38°C
- Crop: Late kharif

Major Producing States

- Madhya Pradesh, Rajasthan, Punjab, Haryana, Uttar Pradesh, Gujarat, Maharashtra

Benefits

- Adaptogenic (stress resistance)
- Anti-inflammatory
- Improves sleep, immunity, and energy levels

Bio-Bitumen

Syllabus: GS-3; Science & Technology, Environment, Infrastructure

Context

The Union Minister of State for Science and Technology announced that India has entered the era of “*Clean, Green Highways*” following the successful technology transfer of “**Bio-Bitumen via Pyrolysis: From Farm Residue to Roads.**”



About Bio-Bitumen

- Bio-bitumen is a sustainable alternative to petroleum-based bitumen.
- It is produced from **renewable organic materials** such as agricultural residue, plant-based oils, and biomass.
- These materials undergo specialised processing to create a binder comparable to conventional bitumen.
- It reduces **carbon emissions** and **import dependency** on crude oil.

Significance

- Significantly lower greenhouse gas emissions.
- Promotes circular economy and waste-to-wealth.
- Suitable for eco-friendly road infrastructure.

Key Processes in Bio-Bitumen Production

1. **Biomass Collection & Processing** – Collection and pre-processing of crop residue and plant-based materials.
2. **Pyrolysis & Bio-oil Extraction** – Thermal decomposition of biomass at controlled temperatures.

3. **Refining & Modification** – Polymer modification to enhance viscosity, adhesion, and thermal stability.
4. **Blending & Finalisation** – Partial blending with conventional bitumen to improve performance.

Bio-Bitumen via Pyrolysis Technology

- Developed by **CSIR-CRRI, New Delhi** and **CSIR-IIP, Dehradun**.
- Uses post-harvest rice straw converted into bio-oil through pyrolysis.
- **20–30% replacement** of conventional bitumen possible without compromising performance.

The Right to Disconnect in an “Always-On” Economy

Syllabus: GS-2: Fundamental Rights – new concepts related to rights

Context:

Why The Right To Disconnect Bill 2025 has sparked buzz and when it will become a law.

Background & Context

- Rapid digitisation, remote work, and instant communication tools have blurred boundaries between **work time and personal life**.
- Employees are increasingly expected to remain available beyond official working hours.
- This has given rise to an “**always-on**” **work culture**, affecting employee well-being and productivity.

Key Concerns Highlighted



a) Work-Life Imbalance

- Expansion of work into evenings, weekends, and holidays.
- Difficulty in mentally disengaging from work due to continuous digital notifications.
- Erosion of family life, leisure, and rest.

b) Health and Productivity Issues

- Increased incidence of:
 - Stress and burnout
 - Anxiety and depression
 - Lifestyle diseases
- Long working hours do not necessarily translate into higher productivity.

c) Unequal Impact on Workers

- White-collar, IT, gig, platform, and remote workers are most affected.
- Power asymmetry prevents employees from refusing after-hours work.
- Women workers face disproportionate burdens due to unpaid care responsibilities.

Legal and Institutional Gaps in India

- Existing labour laws are designed for **factory-based and time-bound work**.
- Labour Codes do not adequately address:
 - Digital surveillance
 - Remote work expectations
 - After-hours communication
- Gig and contractual workers largely remain outside formal protections.

Concept of the Right to Disconnect

- The **Right to Disconnect** refers to:
 - The right of employees **not to respond to work-related communications outside working hours**.
 - Protection against adverse consequences for exercising this right.
- Objectives:
 - Safeguard mental and physical health
 - Restore work-life boundaries
 - Promote dignity of labour

Legislative Developments in India

- Proposal through a **Right to Disconnect Bill** (Private Member's Bill).
- Key provisions proposed:
 - Legal recognition of non-availability beyond work hours
 - Mandatory employer policies defining contact hours
 - Grievance redressal mechanisms
- Challenges:
 - Defining “emergency work”
 - Applicability across sectors
 - Enforcement in informal and gig economy

International Practices

- Several countries have enacted legal or regulatory frameworks recognising the right to disconnect.
- Common features:
 - Employer obligation to respect non-working hours
 - Collective bargaining-based implementation
 - Emphasis on employee well-being
- Evidence suggests:
 - Improved job satisfaction
 - Better productivity
 - Reduced burnout

Need for Cultural and Organisational Change

- Law alone is insufficient without workplace reform.
- Required measures:
 - Shift from **availability-based** to **outcome-based** evaluation
 - Sensitisation of management
 - Leadership by example
 - Integration of mental health support systems

Way Forward

- Harmonise labour laws with digital-age realities.

- Extend protections to gig and platform workers.
- Encourage flexible work policies with clear boundaries.
- Promote social dialogue between employers, employees, and the State.

Conclusion

- The right to disconnect is essential for **sustainable economic growth**.
- A healthy workforce is more productive than an overworked one.
- Protecting personal time is not anti-growth but **pro-human and pro-efficiency**.

Open Network for Digital Commerce

Syllabus: GS-3: Indian Economy –Digital Commerce

Context:

- **Archaeological Survey of India (ASI)** has enabled **online ticket booking for 170+ centrally protected monuments and museums**
- Platform used: **Open Network for Digital Commerce (ONDC)**
- Significance:
 - Enhances **digital access to cultural heritage**
 - Improves **tourist convenience and transparency**
 - Integrates heritage management with **India's digital public infrastructure (DPI) ecosystem**

Open Network for Digital Commerce (ONDC)

What is ONDC?

- An **open, interoperable digital network** for buying and selling goods and services
- Based on **open protocols** rather than closed, proprietary platforms
- Prevents **platform monopolies** in e-commerce

Launch

- **April 2022**

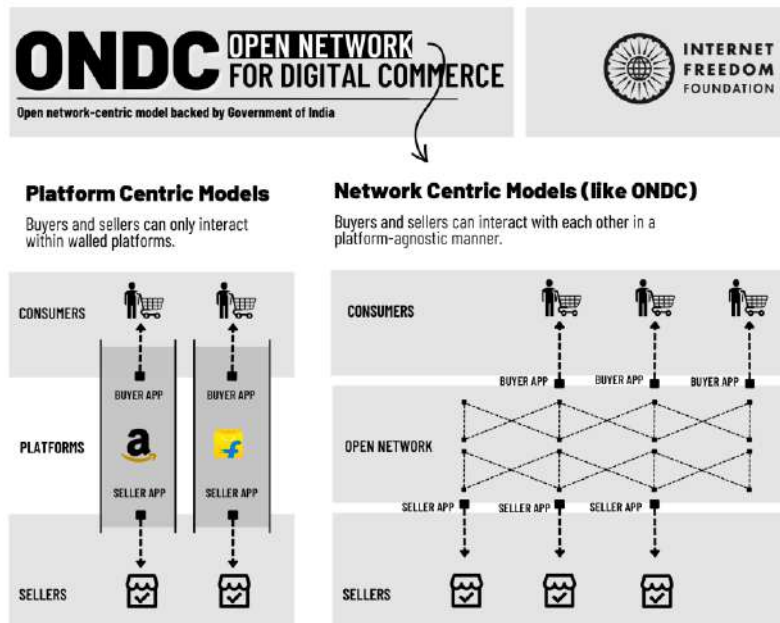
Nodal Ministry

- Department for Promotion of Industry and Internal Trade (DPIIT)
- Under the **Ministry of Commerce and Industry**

Objectives / Aims of ONDC

- **Democratise digital commerce**
 - Break platform silos (Amazon–Flipkart model)
- **Level playing field**
 - Especially for **MSMEs, small sellers, startups**
- **Promote:**
 - Inclusivity
 - Competition
 - Innovation
 - Cost efficiency
- Enable **consumer choice and price discovery**

How ONDC Works



Key Features

- **Decentralised network**, not a central marketplace
- ONDC:
 - Does not own inventory
 - Does not control sellers
 - Does not process orders directly

- Acts as a **connector** using common digital standards

Mechanism

- Uses **open protocols & standardised APIs**
- Any **buyer app** can discover products/services from any **seller app**
- Interoperability ensured irrespective of the platform owner

Participants in ONDC Ecosystem

- **Buyer Applications**
 - Search, discovery, price comparison, ordering
- **Seller Applications**
 - Catalogue management, pricing, inventory, order confirmation
- **Logistics Providers**
 - Pickup, delivery, tracking (pan-India reach)
- **Technology Enablers**
 - Digital infrastructure, integrations, analytics tools

Outcome

- Seamless discovery and transactions
- Reduced entry barriers
- Enhanced competition and innovation

Domains Covered Under ONDC (as of now)

Goods	Services	Digital / Emerging
Food & Beverage	Mobility (autos, cabs, metro, flights)	Financial Services (credit, insurance, investments)
Grocery	Skilled & Subscription-based Services	ONEST – Education & Training
Fashion & Footwear	Health & Wellness	Gift Cards
Home & Kitchen	Agriculture (inputs, outputs, services)	—
Electronics	Beauty & Personal Care	—

Significance of ASI-ONDC Integration

Governance & Administration

- Promotes **e-governance in cultural heritage**
- Reduces intermediaries and leakages

Tourism & Economy

- Boosts **heritage tourism**
- Encourages **formalisation of tourism services**

Digital India Alignment

- Complements **India Stack, DPI, and platform-neutral governance**
- Demonstrates ONDC's scalability beyond retail commerce