

## ASHA Workers

ASHAs (Accredited Social Health Activists) play a pivotal role in India's healthcare system, especially in rural and underserved areas. Despite their significant contributions to maternal health, immunization, and awareness, these workers face numerous challenges that hinder their impact.

### ASHA Workers in India:

- **Origin:** Launched in 2005 under the National Rural Health Mission (NRHM) to strengthen grassroots healthcare in rural areas.
- **Who Are ASHAs:** Female volunteers from local communities trained to promote health awareness and access to healthcare services.
- **Aim:** To serve as a link between communities and the healthcare system, fostering healthcare awareness and access at the village level.
- **Functions:**
  - Maternal and child healthcare.
  - Immunization drives.
  - Health education on sanitation, hygiene, and nutrition.
  - Support under national health programs like tuberculosis and family planning.

### Role of ASHAs in Developing India:

1. **Improving Maternal and Child Health:** Promoting institutional deliveries and antenatal care has reduced maternal and infant mortality rates.

**E.g.:** Institutional delivery rate increased from 47% (2007) to 79% (2022).

1. **Enhancing Immunization Rates:** Mobilizing communities to participate in vaccination programs has improved child immunization rates.
2. **Disease Surveillance:** Reporting outbreaks and promoting early diagnosis under programs like Revised National Tuberculosis Control.
3. **Advocacy and Behaviour Change:** Creating awareness of sanitation, nutrition, and lifestyle diseases has led to improved public health behaviour.
4. **Bridging Healthcare Gaps:** Acting as a liaison between rural communities and public health facilities.

### Government Initiatives to Empower ASHAs:

1. **Remuneration and Incentives:** Increased pay and performance-based incentives announced in the 2018 budget.
2. **Insurance Coverage:** Free health insurance under [Ayushman Bharat](#) and Pradhan Mantri Jeevan Jyoti Bima Yojana.

3. **Training Programs:** Skill enhancement through continuous training under National Health Mission (NHM).
4. **Recognition and Support:** Platforms like Village Health Mapping and digital tools for better outreach and feedback.
5. **Infrastructure Development:** Improved logistics and access to medical supplies for effective delivery of services.

### **Challenges Faced by ASHA Workers:**

1. **Heavy Workload:** Multiple responsibilities with limited support strain their efficiency.
2. **Inadequate Compensation:** Delayed payments and lack of social security benefits affect motivation.
3. **Gender and Caste Discrimination:** ASHAs, often from marginalized communities, face systemic biases.
4. **Lack of Recognition:** Insufficient acknowledgment of their efforts leads to dissatisfaction.
5. **Inadequate Infrastructure:** Limited access to transport and medical supplies hampers service delivery.

### **Way Ahead:**

1. **Formalize Employment Status:** Transition ASHAs from volunteer roles to formal employment with benefits.
2. **Strengthen Training and Resources:** Provide modern training and ensure a steady supply of essential medical tools.
3. **Enhance Financial Stability:** Introduce timely and higher compensation with performance bonuses.
4. **Recognition Programs:** Establish awards and public acknowledgment to boost morale.
5. **Digital Integration:** Expand access to technology for real-time data collection and communication.

### **Conclusion:**

As Nelson Mandela once said, “**Health cannot be a question of income; it is a fundamental human right.**” Empowering ASHAs is not just a policy priority but a moral imperative. Strengthening their roles with dignity, resources, and support will ensure that India’s healthcare system becomes more inclusive, effective, and capable of serving even the most marginalized.

## **Simultaneous election**

The Union Cabinet approved “One Nation, One Election” to synchronize elections, sparking debates on its impact on federalism, democracy, and logistics.

### **What Is One Nation One Election (ONOE)?**

- **Definition:** ONOE refers to holding elections for the Lok Sabha, all state assemblies, and local bodies simultaneously to streamline governance and reduce costs.
- **Historical Practice:** Simultaneous elections were conducted in India from 1951-1967 but were disrupted due to premature dissolutions of assemblies and the Lok Sabha.
- **Scope:** ONOE covers elections for the Lok Sabha and state assemblies, with municipal and panchayat elections synchronized within 100 days.

### **Constitutional Articles Involved in ONOE:**

- **Article 83 & 172:** Relates to the duration of the Lok Sabha and state assemblies, requiring amendments for synchronization.
- **Article 324A:** Proposed for establishing logistical mechanisms for simultaneous elections.
- **Article 368:** Governs constitutional amendments requiring state ratification for changes impacting local bodies.

### **Need for ONOE:**

1. **Reduced Costs:** ONOE aims to cut the high financial burden of frequent elections.
2. **Governance Efficiency:** Eliminates prolonged disruptions caused by the Model Code of Conduct (MCC).
3. **Resource Optimization:** Reduces diversion of security forces and personnel from essential duties.
4. **Voter Fatigue:** Prevents declining voter turnout caused by repeated elections.
5. **Development Continuity:** Minimizes policy paralysis and ensures uninterrupted governance.

### **Ramnath Kovind Committee Recommendations:**

1. **Two-Phase Elections:**
  - Phase 1: Lok Sabha and state assemblies.
  - Phase 2: Local body elections within 100 days.
2. **New Article 82A:** Specifies terms and synchronization mechanisms for assemblies and Lok Sabha.
3. **Midterm Polls:** Ensures new elections for dissolved assemblies/Lok Sabha align with the national cycle.

4. **Single Electoral Roll:** A unified roll for all elections to streamline processes.
5. **Logistical Planning:** Advance procurement of EVMs, VVPATs, and deployment of personnel.

### **Challenges of ONOE:**

1. **Overshadowing Regional Issues:** National issues may dominate, sidelining local priorities.
2. **Impact on Regional Parties:** Smaller parties may lose relevance, affecting political diversity.
3. **Federalism Concerns:** Centralized decision-making may undermine state autonomy.
4. **Logistical Hurdles:** Requires a significant scale-up in infrastructure, resources, and trained personnel.
5. **Midterm Dissolutions:** Aligning dissolved assemblies with the national cycle is complex.

### **Way Ahead:**

1. **Legislative Deliberation:** Engage all stakeholders through detailed parliamentary discussions.
2. **Consensus Building:** Include states and regional parties to address federal concerns.
3. **Pilot Projects:** Implement ONOE in phases to assess feasibility and challenges.
4. **Resource Investment:** Strengthen electoral infrastructure and ensure preparedness.
5. **Public Awareness:** Educate citizens on the benefits and changes under ONOE.

### **Conclusion:**

A balanced approach is essential for implementing ONOE, ensuring cost efficiency without compromising democratic values, federal principles, and regional representation. As Justice Dipak Misra noted, “Any reform must harmonize with constitutional integrity and public welfare.”

## Most Favoured Nation

Switzerland has recently revoked India's Most Favoured Nation (MFN) clause in Double taxation avoidance agreement status following a Supreme Court ruling in an adverse tax case involving Nestle.

### About Most Favoured Nation (MFN):

- **What It Is:**
  - MFN is a principle under the World Trade Organization (WTO) that mandates non-discrimination among member countries in trade policies.
  - Members are treated equally in terms of tariffs, quotas, and trade barriers.
- **Designation Given By:**
  - WTO grants the MFN designation automatically to its 164 members.
- **Features of MFN:**
  - Ensures lowest tariffs, highest import quotas, and minimal trade barriers among member countries.
  - Aims to promote fair trade and equitable market access.
- **Origin:**
  - Established post-World War II as a cornerstone of the multilateral trading system under the WTO framework.
- **Exceptions:**
  - Bilateral or regional trade agreements.
  - Special access for developing nations.
  - Non-WTO countries like Iran or North Korea are not bound by these rules.
- **Removal of MFN:**
  - No formal WTO procedure for suspending MFN status exists.
  - Members are not obligated to notify the WTO when removing MFN treatment.
- **Recent Development:**
  - Effective January 1, 2025, Indian companies face a 10% withholding tax on income in Switzerland.

## **African Swine Fever**

An outbreak of **African Swine Fever** (ASF), a highly contagious disease affecting pigs, has been reported in **Kerala's Kottayam** district. Authorities have initiated culling measures and declared infected zones to contain the disease's spread.

### **About African Swine Fever (ASF):**

- **Origin:**
  - ASF is endemic to sub-Saharan Africa but has spread globally to regions like Asia and Europe.
- **Vector:**
  - Transmitted through direct contact with infected animals, contaminated clothing, vehicles, or bites by infectious soft ticks.
- **Mode of Spread:**
  - Direct contact with infected pigs or pork products.
  - Indirect contact via contaminated surfaces and equipment.
- **Disease Found In:**
  - Affects domestic and wild pigs exclusively.
- **Zoonotic or Not:**
  - ASF is not zoonotic; it poses no risk to human health.
- **Symptoms:**
  - Fever, loss of appetite, inflamed eye membranes, red skin, diarrhea, and vomiting.
- **Cure:**
  - No vaccine or cure is available. Culling infected pigs is the only effective containment measure.

## Artificial Solar Eclipse

The European Space Agency launched [Proba-3](#) from India to create artificial solar eclipses for extended Sun corona studies using precise formation flying.

### What is an Artificial Solar Eclipse?

- **Definition:** An artificial solar eclipse mimics the natural phenomenon where the moon blocks sunlight, allowing detailed observation of the Sun's corona.
- **Created By:** Two satellites align to block the Sun's light, creating a controlled shadow for scientific study.
- **Purpose:** To observe the Sun's corona and study phenomena such as why it is hotter than the Sun's surface.

### How Artificial Solar Eclipse Works

- **Satellite Pair:** Two satellites — the Coronagraph Spacecraft (CSC) and the Occulter (OSC) — maintain precise alignment to simulate an eclipse.
- **Shadow Creation:** The Occulter spacecraft casts a shadow onto the Coronagraph spacecraft, mimicking the moon's role in a natural eclipse.
- **Precision:** Millimetres-level accuracy ensures a consistent eclipse for up to six hours per orbit.

### Significance of Artificial Solar Eclipse

- **Extended Observations:** Enables studying the Sun's corona for hours, unlike natural eclipses, which last only minutes.
- **Space Weather Predictions:** Helps predict geomagnetic storms and mitigate disruptions to satellites and Earth-based systems.
- **Scientific Insight:** Unveils the mysteries of the corona, including its temperature anomaly and solar flares.

### What is [Precise Formation Flying \(PFF\)](#) Technology?

- **Definition:** A technology that enables satellites to maintain an exact position and orientation relative to each other in orbit.
- **Mechanism:** Uses GPS, inter-satellite radio links, and automated control systems for alignment.
- **Implementation in Proba-3:** The satellites stay 150 meters apart, maintaining millimetre-level precision to simulate an eclipse.
- **Benefits:** Enhances mission accuracy and provides a platform for advanced observational techniques.

## Jupiter Moon

NASA's Juno mission has revealed new insights into Io, Jupiter's volcanic moon, solving mysteries about its extreme activity and tidal heating.

### About Io Moon:

- | <u>What</u> | <u>It</u>  | <u>Is:</u> |
|-------------|--|------------|
|             | Io is Jupiter's third-largest moon, about the size of Earth's Moon, known for having over 400 active volcanoes, making it the most volcanically active body in the solar system. |            |
- **Why Volcanic Activity Is Higher:**
  - Io's elliptical orbit around Jupiter creates **tidal flexing**, generating immense heat inside the moon.
  - This heat melts Io's interior, powering its volcanic eruptions and lava flows.
  - Separate magma chambers, rather than a global magma ocean, drive the activity.
- **Significance:**
  - Io provides insights into **tidal heating**, influencing theories about other celestial bodies like Europa and Enceladus.
  - The study of Io's volcanic activity helps understand exoplanets and super-Earths with extreme geological conditions.
- **Moons of Jupiter:** Jupiter has 95 confirmed moons, the most famous being the Galilean moons—**Io, Europa, Ganymede, and Callisto**. Io is the innermost of these moons, with a dynamic surface shaped by its intense volcanic activity.



## Malwa Canal

The Malwa Canal project in Punjab seeks to improve irrigation in southern regions but raises environmental concerns over forest land impacts.

### About Malwa Canal Project:

- **States Involved:** Punjab and Rajasthan.
- **River Source:** Originates from the [Sutlej](#) River at Harike Headworks in Ferozepur district.
- **Length and Depth:** The canal spans 149.53 kilometers and is 12 feet deep.
- **Aim:** Designed to irrigate nearly 2 lakh acres of farmland in southern Punjab.
- **Significance:**
  - 
  - Alleviates water scarcity in southern Punjab.
  - Provides equitable water distribution within Punjab while maintaining allocations to Rajasthan and Haryana.
  - Boosts agricultural productivity and addresses drought-prone areas.