



14 June, 2024

Results of Survey on AYUSH

Context: The NSSO conducted the first all-India 'Ayush' survey from July 2022 to June 2023, as part of the 79th National Sample Survey.

- This survey covered the entire Indian Union, excluding a few inaccessible villages in the Andaman & Nicobar Islands.

Objectives

➤ The survey aimed to collect information on:

- Awareness of the traditional system of healthcare (Ayush system of medicine).
- Uses of Ayush for prevention or treatment of ailments.
- Awareness of households about home remedies, medicinal plants, local health traditions, and folk medicine.
- Additionally, the survey gathered information on household expenditure for treatments using Ayush medicine systems.

➤ Sample Design

- A stratified multi-stage sampling design was used, with villages in rural areas and urban frame survey (UFS) blocks in urban areas considered as first stage units (FSUs).
- The ultimate stage units (USUs) were households in both sectors.
- Simple Random Sampling Without Replacement (SRSWOR) was used for selecting FSUs and households from the chosen FSUs.

Conceptual Framework

➤ Awareness of Ayush: Defined for individuals aged 15 years or more who:

- Have taken Ayush treatment anytime.
- Have heard about Ayush systems from various sources.
- Are aware of medicinal plants, home remedies, or traditional practices.
- Are professionally engaged with Ayush healthcare centers or service providers.

Major Findings

➤ Awareness of Ayush

- 95% of rural and 96% of urban individuals aged 15 and above are aware of Ayush.
- 79% of rural and 80% of urban households have at least one member aware of medicinal plants and home medicines.
- Around 24% of households in both rural and urban areas have at least one member aware of folk medicine or local health traditions.

➤ Use of Ayush

- Use of Ayush for prevention or treatment of ailments in the past 365 days is higher in urban areas than in rural areas.

- Ayurveda is preferred over other Ayush systems for prevention or treatment of ailments.
- In rural areas, 40.5% of individuals used Ayurveda, and 9.4% used other systems (including Yoga & Naturopathy, Unani, Siddha, Sowa-Rigpa, and Homeopathy).
- In urban areas, 45.5% of individuals used Ayurveda, and 12.8% used other systems.
- Overall, 46.3% of rural and 52.9% of urban individuals used Ayush for prevention or treatment.
- Ayush is mostly used for rejuvenation or preventive purposes, followed by therapeutic or curative treatment.

➤ Expenditure on Ayush

- Average expenditure per person for prevention or treatment of ailments using Ayush during the last 365 days:
- In rural areas: Rs. 394 for Ayurveda and Rs. 622 for other systems.
- In urban areas: Rs. 499 for Ayurveda and Rs. 592 for other systems.
- Overall expenditure: Rs. 472 in rural and Rs. 574 in urban areas.

India's performance in Global Gender Gap Index 2024

Context: India slipped to 129th place on the World Economic Forum's Global Gender Gap index, while Iceland retained the top spot, according to the rankings published on June 12.

➤ Overall Performance

- India has closed 64.1% of its gender gap in 2024.
- The country dropped from 127th to 129th place globally among 146 countries.
- It ranks third lowest among South Asian economies, faring worse than Bangladesh (99th), Nepal (117th), Sri Lanka (122nd), and Bhutan (124th), but better than Pakistan (145th).

➤ Performance by Parameters

- Economic Participation and Opportunity**
 - Ranked 142nd globally.
 - Women earn 39.8% of what men earn on average.
 - Despite a slight improvement, economic parity remains significantly low.
 - India's economic parity peaked at 46% in 2012.
 - Key areas needing improvement include earned income, senior roles, labour-force participation, and professional and technical jobs.
- Health and Survival**
 - Ranked 142nd globally.
 - Significant disparities persist in health outcomes and access to healthcare for women.

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14 June, 2024

• Educational Attainment

- Ranked 112th globally.
- While enrollment in primary, secondary, and tertiary education is high for women, the literacy rate gap between men and women is 17.2 percentage points.
- This gap leaves India ranked 124th on the literacy rate indicator.

• Political Empowerment

- Ranked 65th globally.
- Scored within the top 10 on the head-of-state indicator with a 40.7% score.
- Representation at the federal level remains low: women hold only 6.9% of ministerial positions and 17.2% of parliamentary seats.
- In the newly formed Indian cabinet, only two out of 30 Union ministers are women, down from 10 in the previous government.
- The number of female ministers in the central council has decreased from 10 in the previous government to seven.

➤ Economic Disparities

- India's economic parity requires a 6.2 percentage point improvement to reach the 2012 high of 46%.
- Bridging gender gaps in key economic areas is crucial for improvement:
 - Earned income:** currently at 28.6%
 - Legislative, senior officials, and management roles:** 14.4%
 - Labour-force participation rate:** 45.9%
 - Professional and technical workers:** 49.4%

➤ Educational Disparities

- Shares of women in primary, secondary, and tertiary education enrollments are high but increasing modestly.
- The literacy rate gap between men and women is 17.2 percentage points, contributing to India's lower rank in educational attainment.

➤ Political Disparities

- India's high score in the head-of-state indicator (40.7%) contrasts with its low representation in ministerial and parliamentary positions.
- Political disparity is significant, with only 6.9% of ministerial roles and 17.2% of parliamentary seats held by women.

➤ Comparison with Regional Peers

- Despite improvements in political participation, India still lags behind regional peers like Nepal in terms of women's representation at the ministerial level and in parliaments.
- Political disparity is a common issue across South Asia, though the region has moved 4 percentage points towards political parity since 2006.

Southern Asia

Economy	Rank		Score
	Regional	Global	
Bangladesh	1	99	0.689
Nepal	2	117	0.664
Sri Lanka	3	122	0.653
Bhutan	4	124	0.651
India	5	129	0.641
Maldives	6	132	0.633
Pakistan	7	145	0.570

Optical Atomic Clock

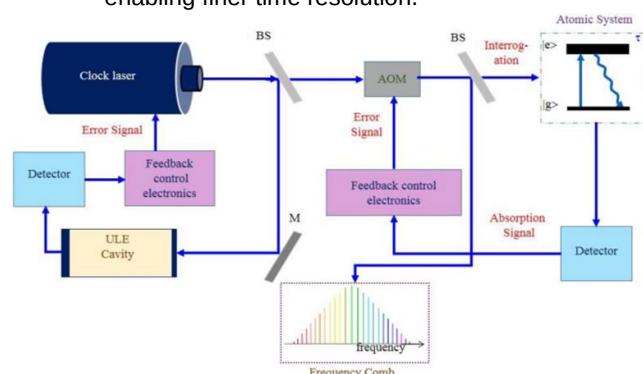
Context: Researchers have developed a miniaturized Optical Atomic Clock for ships, which is more accurate than Caesium-based Atomic clocks.

Optical Atomic Clocks: Cutting-edge technology in precise timekeeping, offering superior accuracy compared to traditional atomic clocks.

Optical Frequencies: Utilize visible, ultraviolet, and infrared light for time measurement, leading to higher precision.

➤ Principle of Operation

- Atomic Transitions:** Operate on the same principle as traditional atomic clocks, but with transitions stimulated by lasers.
- Resonance Frequency:** Use optical range for more precise and stable measurements.
- Lasers:** Coherent light sources used to stimulate atomic transitions with high precision.
- Coherent Light:** Emitted light waves have the same frequency and stable wavelength relationships.
- Higher Frequency:** Operate at much higher frequencies than microwave-based atomic clocks, enabling finer time resolution.



➤ Common Atoms Used

- Strontium (Sr):** Preferred for its stable optical transitions and narrow linewidths.
- Ytterbium (Yb):** Used for its similar properties to strontium.

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14 June, 2024

- **Iodine (I2):** Used in the new portable optical atomic clock for its robustness and high accuracy.
- **Caesium (Cs-133):** Traditional atomic clocks use caesium for its stability and natural occurrence.

➤ **Advantages of Optical Atomic Clocks**

- **Accuracy:** Can lose or gain only one second over 300 billion years, compared to traditional atomic clocks' 1.4 million years.
- **Stability:** Higher operating frequencies and narrower linewidths lead to exceptional long-term stability.

- **Precision:** Ability to measure smaller time increments more accurately.

➤ **Applications**

- **Maritime and Navigation:** Enhances navigation and communication at sea.
- **Scientific Research:** Facilitates precise monitoring of underwater seismic and volcanic activity.
- **Space Exploration:** Aids in conducting experiments on the theories of relativity and can potentially reduce satellite-based navigation costs.

NEWS IN BETWEEN THE LINES

Indira Gandhi National Centre for Arts



Indira Gandhi National Centre for the Arts (IGNCA) and Sansad TV signed an agreement recently to make Indian art and culture more accessible to the people.

About Indira Gandhi National Centre for Arts:

- The Indira Gandhi National Centre for the Arts (IGNCA) is a **national institution** that studies the arts and culture and their connections to other fields of study.
- It was established in **1985** by Prime Minister Rajiv Gandhi.
- It is an **autonomous institution under the Ministry of Culture** and is dedicated to research, academic pursuit and dissemination in the arts.
- The IGNCA explores various art forms, encompassing creative **literature, visual arts, material culture, photography**, film and performing arts such as music, dance and **theater**.
- It also organizes and participates in activities for the cultural rediscovery and enrichment of cities.

Atlantic Bluefin Tuna



Scientists from Trinity College Dublin conducted a study revealing that warming seas are causing Atlantic bluefin tuna to migrate northward.

About the Atlantic Bluefin Tuna:

- Atlantic Bluefin Tuna (*Thunnus thynnus*) is a **large, highly migratory fish** found in the **North Atlantic Ocean**.
- It plays a crucial role in marine ecosystems as **top predator**, regulating populations of prey species like squid and small fish.
- There are **three species** of bluefin: **Atlantic** (the largest and most endangered), **Pacific** and **Southern**.
- It is one of the **most valuable fish species commercially**, prized for its **high-quality meat** in sushi and sashimi markets, particularly in **Japan**.
- Its population has been severely depleted globally due to overfishing, leading to international conservation efforts and fishing quotas.
- They undertake extensive migrations across the Atlantic Ocean, visiting different regions for feeding and spawning, including the **Mediterranean Sea**.
- International bodies such as **ICCAT** (International Commission for the Conservation of Atlantic Tunas) **regulate fishing quotas** and **monitor** populations to ensure sustainable management.
- It is listed as "**Least Concern**" in the IUCN Red list.

F-16 Fighter Aircraft



Recently, Turkey and the United States finalized a \$23 billion deal for the sale of F-16 warplanes after months of negotiations, following Washington's approval.

About F-16 Fighter Aircraft:

- The F-16 Fighting Falcon, **also known as the F-16**, is a **single-seat, single-engine, supersonic, multirole fighter aircraft** that has been the United States' frontline fighter plane since **1979**.
- The F-16 **can travel over 500 miles** in an **air-to-surface mission**, defend against hostile aircraft, and return to its starting point.
- Its combat radius is greater than that of potential threat fighter aircraft.
- It can **identify low-flying aircraft in radar ground clutter** and accurately pinpoint targets in all weather conditions, which allows it to deliver explosives with precision in non-visual bombing scenarios.
- It is **powered by a single Pratt & Whitney or General Electric turbofan engine** that can **generate 23,000 to 29,000 pounds of thrust**, accelerating the aircraft to more than twice the speed of sound.
- It has a **fuselage length of about 15 meters** and a **wingspan of about nine meters**, and an empty weight of 9,000 kilograms.
- The latest variant of the F-16 is the **F-16V or Viper**, which is manufactured by Lockheed Martin.

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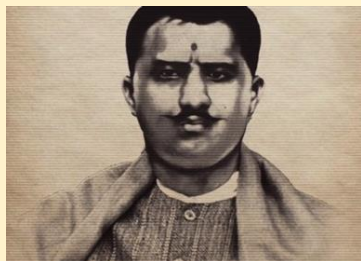




14 June, 2024

Personality in News

Ramprasad Bismil



Recently, Ramprasad Bismil was remembered on his birth anniversary.

Ramprasad Bismil (11 June 1897-19 December 1927)

- Ram Prasad Bismil, an **Indian poet, writer and revolutionary** was born in Shahjahanpur district in North-Western Provinces (present-day Uttar Pradesh).
- He was deeply influenced by the nationalist movement and was **inspired by Bal Gangadhar Tilak and Swami Vivekananda**.

Contributions:

- Ramprasad Bismil was **involved in the Kakori Conspiracy (1925)**, where revolutionaries targeted a train carrying government funds.
- He was a key **member of the Hindustan Republican Association (HRA)**, later **renamed as Hindustan Socialist Republican Association (HSRA)**.
- At a young age, he **joined the Arya Samaj Youth Association** and began propagating the teachings of Swami Dayanand.
- He authored the famous patriotic poem "**Sarfarooshi ki Tamanna**" which became a rallying cry for the freedom fighters.

Ethical Values: Leadership, Courage, Integrity, Patriotism, etc.

Place in News

Kuwait

Recently, a massive fire in Kuwait's Al-Mangaf area resulted in 49 deaths, including 40 Indians, prompting an investigation and a coordinated response from both Indian and Kuwaiti authorities.

Kuwait (Capital: Kuwait City)

Location: Kuwait, officially the State of Kuwait is a country situated in the northeastern part of the Arabian Peninsula in **Western Asia**.

Boundaries:

- Kuwait shares its borders with the **Persian Gulf** (East), **Iraq** (North & West) and **Saudi Arabia** (South).
- It also shares **maritime borders** with **Iran**.

Physical Features:

- The highest point in Kuwait is **Mutla Ridge**.
- Kuwait's major mineral resources include **abundant oil and natural gas reserves**, as well as **limestone and silica sands**.

Membership: Kuwait is a member of the **United Nations, Arab League, Organization of Petroleum Exporting Countries (OPEC) and Gulf Cooperation Council (GCC)**.

Currency: Kuwait's currency is the **Kuwaiti Dinar (KWD)** which is one of the **highest-valued currency units in the world**.

Historical Context:

- Kuwait **gained independence** from the United Kingdom on **June 19, 1961**.
- The country was **invaded by Iraq in 1990**, leading to the **Gulf War**, after which it was liberated by coalition forces in **1991**.



POINTS TO PONDER

- The President of India recently rejected the mercy petition of a Lashkar-e-Taiba terrorist involved in the December 2000 Red Fort attack. According to Article 72 of the Indian Constitution, what powers does the President hold regarding mercy petitions? – **The power to grant pardons and commute sentences**
- Recently, which Indian research institution discovered three craters (Lal crater, Mursan crater and hilsa crater) on Mars? – **Physical Research Laboratory (PRL), Ahmedabad**
- Paleontologists recently discovered a new species of pterosaur after analysing 100-million-year-old fossilised bones found in which region of Australia? – **Queensland**
- Recently, which location on Negros Island, Philippines, witnessed rivers of cold lava following an explosive eruption? – **Mt. Kanlaon Natural Park**
- Researchers from IIT Madras and NASA are studying multi-drug resistant (MDR) pathogens, focusing on Enterobacter bugandensis, aboard which space facility? – **International Space Station (ISS)**

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