

**SOCIAL JUSTICE GS PAPER II**

**Public Health Nutrition Policies**

A recent evaluation of the global progress toward the achievement (or not) of the **Global Nutrition Targets (GNTs)** was published in The Lancet.

- The analysis provided estimates of **progress at a regional and national level in 204 countries** from **2012 to 2021**, with projections up to **2050**.
- In general, there appeared to be **slow and insufficient** progress across countries.
- By 2030, it was projected that few countries (not India) would meet the targets for stunting, and none would meet low birthweight, anemia, and childhood obesity.
- There is little progress in undernutrition, but an **increase in overweight**.

**About Public Health Nutrition**

- **Definition:** Public health nutrition is the field of study that is concerned with promotion of **good health through prevention of nutrition-related illnesses** in the population, and the government policies and programmes that are aimed at solving these problems.
- It can also be described as the art and science of promoting health and **preventing diseases**, prolonging life, through the organised efforts/action of society.
- It **integrates science**, policy, and programs to address **dietary deficiencies**, excesses, and related health conditions, ensuring overall well-being.

**Importance of Nutritional Security**

- **Foundation for Human Capital:** Poor nutrition affects **stunting in 35.5% of children under five** in India (NFHS-5).
  - Malnutrition costs India **\$10 billion annually** in productivity losses (World Bank).
- **Improves Health Outcomes:** Adequate nutrition reduces risks of diseases like anemia, affecting **57% of women of reproductive age** (NFHS-5).
  - **Example:** Fortification of **rice with iron** in India's PDS aims to address iron-deficiency anemia.
- **Boosts Economic Growth:** A well-nourished population increases workforce productivity by **20-30%** (WHO).
  - **Example:** Vietnam reduced malnutrition by **20% in a decade**, contributing to a **7% annual GDP growth**.
- **Strengthens Food Systems:** Nutritional security diversifies agriculture to include nutrient-rich crops like millets.
  - **Example:** India declared **2023 as the International Year of Millets**, promoting their cultivation and consumption.
- **Supports Sustainable Development Goals (SDGs):** Targets **SDG 2 (Zero Hunger)** and **SDG 3 (Good Health and Well-being)**.

**Current Nutritional Challenges in India**

- **Double Burden of Malnutrition:** NFHS-5 (2019-21) shows **35.5% of children under 5** are stunted, and **22% of adults** are overweight or obese.
  - High stunting rates are prevalent in states like **Bihar (42.9%)** and **Uttar Pradesh (39.7%)**.
- **Micronutrient Deficiencies (Hidden Hunger):** **57% of women (15-49 years)** and **67% of children (6-59 months)** are anemic (NFHS-5).
  - The prevalence of iodine deficiency disorders persists in mountainous regions despite salt iodization programs.
- **Poor Dietary Diversity:** **Only 11%** of children aged 6-23 months receive an adequately diverse diet (NFHS-5).
  - States like Rajasthan and Madhya Pradesh report inadequate intake of fruits, vegetables, and proteins.
- **Impact of Food Inflation:** Food inflation reached **11.5% in 2024**, making nutritious food unaffordable for many.
  - Rising costs of pulses and edible oils limit their consumption among low-income households.
- **Gender Inequality in Nutrition:** **Women** and girls in rural areas often consume fewer calories and proteins than men due to **cultural norms**.

**India's National Nutrition Policy (NNP)**

- **Adopted in 1993:** Focuses on a multi-sectoral strategy combining health, **food security**, and education.
- **Key Features:**
  - **Direct Interventions:** Supplementary feeding, micronutrient fortification, and nutrition education.
  - **Indirect Interventions:** Improved food production, sanitation, and maternal care.
- **Recent Updates:**
  - **POSHAN Abhiyaan (2018):** Aims to reduce stunting, undernutrition, and anemia by 2-3% annually.
  - **Mid-Day Meal Scheme:** Expanded to include fortified foods and milk in schools.
- **Result:** Reduction in stunting by **3.4%** from NFHS-4 to NFHS-5.

**Way Forward**

- **Data-Driven Targeting:** Use AI and geospatial mapping to identify malnutrition hotspots.
  - **Example:** **Andhra Pradesh's Real-Time Nutrition Monitoring System** improved data collection and policy response.
- **Fortification and Biofortification:** Promote fortified staples like **rice, wheat, and salt** with micronutrients.

- **Example:** Chhattisgarh's fortified rice program reduced anemia by 6% in pilot districts.
- **Behavior Change Campaigns:** Conduct awareness drives to improve dietary diversity and hygiene.
- **Example:** Gujarat's Poshan Sakhi initiative trains women to educate households on balanced diets.
- **Strengthen Localized Nutrition Programs:** Tailor interventions to align with cultural practices and dietary preferences.
- **Example:** Odisha's MAMATA Scheme incentivizes mothers for antenatal and postnatal care.
- **Enhance Public-Private Partnerships (PPP):** Collaborate with **private sectors** to develop affordable, nutrient-rich food products.
- **Example:** Partnerships in Karnataka produce fortified snacks for school children.
- **Others:**
  - Provide supplements to address nutrient deficiencies like iron, vitamin A, and iodine.
  - Educational campaigns, improved healthcare access, sanitation, and community-based initiatives.
  - Ensuring affordability and availability of nutritious food, and government interventions to support low-income groups.

### Conclusion

India's nutrition challenges are multifaceted, spanning undernutrition, overnutrition, and implementation inefficiencies. Addressing these requires holistic strategies, including localized interventions, community engagement, and leveraging technology. By combining global best practices with tailored local solutions, India can achieve its goals of improving public health nutrition and fostering sustainable development.

## GS PAPER 3- ENVIRONMENT

### Climate resilience in India

The article emphasizes the urgent need for India to integrate climate resilience into its financial planning and national priorities. As the country prepares for the upcoming 2025 Budget, the focus on climate adaptation and resilience is critical in the context of rising global temperatures and increasingly extreme weather events.

#### Why is climate resilience important for India in 2025?

1. On January 1, 2025, the India Meteorological Department (IMD) declared 2024 as the hottest year on record since 1901. Similarly, countries like Brazil, China, and Germany reported record-breaking temperatures in 2024.
2. Rising global temperatures intensify challenges for public health and the economy, emphasizing the need for India to prioritize climate adaptation alongside emission mitigation.

#### How vulnerable is India to climate risks?

1. A study by the Council on Energy, Environment, and Water (CEEW) reveals that **8 out of 10 Indians live in districts facing flood, drought, or cyclone risks.**
2. Some regions, like parts of Odisha, Telangana, and Gujarat, face combined threats of multiple climate disasters.
3. Climate extremes are now affecting the country throughout the year.

#### What was the impact of the 2024 heatwaves?

1. **23 states in India are heatwave-prone**, and 2024 recorded over **44,000 heatstroke cases and 300 heat-related deaths** (Ministry of Health and Family Welfare).
2. Delhi's peak power demand rose by **16%** during a 10-day heatwave, highlighting stress on energy infrastructure.
3. Heat stress affected productivity in sectors like agriculture and dairy, while also impacting water reservoirs.

#### How are changing monsoon patterns affecting India?

1. Between 2012-2022, southwest monsoon rainfall declined by **up to 20%** in parts of the Indo-Gangetic plains.
2. Extreme weather events now cause annual crop losses equivalent to **25% of India's GDP.**
3. The Arabian Sea has seen a **52% increase in tropical cyclones** over two decades, while flood early warning systems currently cover only **one-third of flood-prone populations.**
4. States like Telangana, Andhra Pradesh, Tamil Nadu, Uttarakhand, and Himachal Pradesh experienced severe flooding in 2024, including cloudbursts and flash floods.
5. Heavy rainfall events are expected to increase in 2025 and beyond, necessitating improved urban flood preparedness through initiatives like Mission Mausam.

#### What steps can India take to enhance climate resilience?

1. **Detailed Risk Assessments:**
  - Conduct granular risk assessments for heat stress across sectors and populations, identifying vulnerable groups like children, seniors, and those with chronic health conditions.
  - Address heat impacts on livestock and dairy, which contribute **5% of India's GDP**, by using low-cost, renewable energy-based solutions like solar chillers.
2. **Revamp Agricultural Practices:**
  - Nearly **50% of Indian agriculture is rainfed**, making it highly sensitive to monsoon variability.
  - Revise crop weather calendars for rainfed crops and promote flood- and drought-resistant seed varieties developed by ICAR to reduce crop losses.

**3. Strengthen Disaster Risk Financing:**

- The Disaster Management (Amendment) Bill 2024 empowers states to form Urban Disaster Management Authorities, aiding city-level resilience.
- Instruments like **city resilience bonds** and **green municipal bonds** can mobilize necessary finances for adaptation measures.

**Why must climate resilience be a financial priority?**

1. Integrating climate resilience into the mainstream of financial planning is not just an environmental obligation but also a sound economic investment.
2. Adaptation measures can mitigate losses across sectors, from agriculture to urban infrastructure, ensuring long-term sustainability and productivity.

**GS PAPER 3- TECHNOLOGY**

**ISRO Docking Satellites Trial**

The article discusses the Indian Space Research Organisation's (ISRO) upcoming attempt to demonstrate space docking through its **Space Docking Experiment (SpaDeX)** mission. This marks a significant milestone in India's space technology capabilities, making it the fourth country to achieve this feat after the United States, Russia, and China. The experiment involves two small satellites, the Chaser (SDX01) and Target (SDX02), which will be maneuvered into close proximity and then joined together in orbit.

**What is the docking experiment ISRO is attempting?**

1. ISRO is attempting to dock two satellites, SDX01 (Chaser) and SDX02 (Target), in space for the first time.
2. This involves bringing the satellites closer together in orbit and joining them mechanically and electrically.
3. A successful attempt would make India the fourth country with this capability after the US, Russia, and China.

**What is docking, and why is it important?**

1. **Docking Defined:** Docking is the process of maneuvering two spacecraft into the same orbit, bringing them closer, and joining them, either manually or autonomously.
2. **Importance:**
  - Enables the assembly of heavy spacecraft in space.
  - Essential for building space stations like ISRO's planned **Bharatiya Antariksh Station**.
  - Crucial for missions requiring multiple launches, such as crewed lunar missions or sample return missions like **Chandrayaan-4**.

**When and how did the concept of docking originate?**

1. **First Docking:** Achieved by NASA in 1966 during the **Gemini VIII** mission with the Agena target vehicle. It was crewed by astronauts, including Neil Armstrong.
2. **First Automated Docking:** Conducted by the Soviet Union in 1967 with **Kosmos 186 and 188**.
3. **China's Achievement:** Demonstrated docking in 2011 with Shenzhou 8 and Tiangong 1, followed by its first crewed docking in 2012.

**Why is ISRO conducting this docking mission now?**

1. **Long-Term Vision:**
  - To set up a **space station by 2035**.
  - To achieve **human lunar exploration by 2040**.
2. **Immediate Needs:**
  - Docking technology is required for modular space station assembly.
  - Missions like **Chandrayaan-4** will involve docking multiple modules in orbit to return lunar samples.
  - Testing technologies for autonomous and precision docking critical for future missions.

**What will happen during the docking experiment?**

1. **Step-by-Step Maneuvering:**
  - The satellites will drift closer, halting at key distances: **5 km, 1.5 km, 500 m, 225 m, 15 m, and 3 m**.
  - At 3 meters, the docking rings will engage and lock.
2. **Post-Docking Actions:**
  - Satellites will share power and operate as a single unit.
  - Commands will be sent to both satellites simultaneously.
  - After undocking, the satellites will remain in orbit to conduct experiments for two years.

**What is unique about India's docking mechanism?**

1. **Androgynous Design:** Both satellites have identical docking systems, similar to the **International Docking System Standard (IDSS)** but with only two motors compared to 24 in IDSS.
2. **Advanced Sensors:**
  - **Laser Range Finder, Rendezvous Sensor**, and others for precision measurements.
  - New processors using satellite navigation for relative positioning and velocity.
  - These advancements pave the way for fully autonomous docking in future missions.

**What future missions will benefit from docking capability?**

1. **Bharatiya Antariksh Station:**
  - Will consist of **five modules** assembled in orbit, starting with a robotic module launch in 2028.
2. **Chandrayaan-4 Lunar Sample Return:**
  - Requires docking of multiple modules in lunar and Earth orbits.
3. **Human Lunar Mission:**
  - Likely to follow a similar modular assembly approach.

**GS PAPER 3 (ECONOMY) GS PAPER 1 (CULTURE)**

**Terrace Tourism**

With the Uttarayan (Makar Sankranti) festival approaching, **Old Ahmedabad** has become a hub of terrace tourism, where residents rent out their terraces for kite flying and festive celebrations.

**About Terrace Tourism:**

- **What it is:** Renting of residential terraces in **Old Ahmedabad** during festivals like Uttarayan, offering exclusive vantage points for **kite flying** and other activities.
- **Features:**
  - **Cultural Experience:** Celebration of **kite-flying competitions**, traditional food (e.g., **undhiyu, til-chikki**), and local music.
  - **Economic Benefit:** Provides a source of income for house owners, especially women involved in **gruh udyog** (home enterprises).
  - **Community Engagement:** Revives interest in preserving heritage homes and **pols** (traditional housing clusters) in the walled city.
  - **Tourism Boost:** Attracts **NRIs**, tourists, and corporates, adding a commercial dimension to the festival.
- **Significance:**
  - **Cultural Preservation:** Encourages conservation of **heritage homes** in the walled city.
  - **Economic Empowerment:** Supports local families through additional income streams.
  - **Sustainability:** Revives historical practices and promotes the **UNESCO World Heritage tag** for Old Ahmedabad.

**PRELIM FACTS**

**1. Pink Fire Retardant**

As wildfires ravage Southern California, authorities are deploying pink fire retardant, an ammonium phosphate-based solution, to curb the spread of flames.

**What is pink fire retardant?**

- **Scientific Name:** Ammonium Polyphosphate-based slurry.
- **Common Brand:** Phos-Chek, widely used for wildfire suppression.

**Features of pink fire retardant:**

- **Composition:**
  - Contains **ammonium polyphosphate salts**, which coat vegetation to prevent combustion.
  - Includes dyes (typically pink) for visibility against natural landscapes.
- **Functionality:**
  - Does not evaporate easily like water and stays on vegetation longer.
  - Blocks oxygen from feeding fires, slowing their spread.
- **Application:**
  - Sprayed via planes or helicopters ahead of active fires to create protective **fire lines**.

**How is it better than other fire retardants?**

- **Durability:** Long-lasting coating compared to water-based suppressants.
- **Visibility:** The pink dye enhances accuracy in application, aiding firefighters in creating effective barriers.
- **Effectiveness:** Acts proactively by reducing fuel for fires, unlike water, which is reactive and evaporates quickly.

**Concerns about pink fire retardant:**

- **Environmental Impact:** Contains **toxic metals** like chromium and cadmium, harmful to aquatic life and ecosystems when it enters water streams.
- **Health Risks:** Long-term exposure to metals may cause **cancer**, kidney, and liver diseases.
- **Effectiveness:** Its performance is highly dependent on environmental conditions like **terrain, weather, and fuel type**.
- **Cost and Usage:** Expensive and requires vast amounts of resources.

**2. Bharat Cleantech Manufacturing Platform**

Union Minister of Commerce & Industry, launched the Bharat Cleantech Manufacturing Platform at the Bharat Climate Forum 2025 in New Delhi.

**About Bharat Cleantech Manufacturing Platform:**



- **What it is:** A national platform designed to enhance India's cleantech value chains and enable collaboration in the renewable energy sector.
- **Ministry:** Ministry of Commerce & Industry.
- **Aim:**
  - Strengthen India's manufacturing capacity in **solar, wind, hydrogen, and battery storage technologies**.
  - Position India as a **global sustainability and cleantech leader**.
  - Support the achievement of **500 GW Renewable-energy targets by 2030**.
- **Features:**
  - **Fosters Innovation:** Encourages co-innovation and technology sharing among Indian firms.
  - **Financial Support Platform:** Connects businesses with funding opportunities for cleantech projects.
  - **Self-Sustainability Focus:** Aims for an independent cleantech sector, reducing reliance on subsidies and incentives.
  - **Scalability:** Drives large-scale manufacturing to enhance India's global competitiveness in renewable energy.
  - **Sustainability Leadership:** Supports India's commitment to its **Nationally Determined Contributions (NDCs)** under the **Paris Agreement**.

### 3. UN Committee of Experts on Big Data and Data Science for Official Statistics

In a significant milestone, India has joined the prestigious UN Committee of Experts on Big Data and Data Science for Official Statistics.

#### **About UN Committee of Experts on Big Data and Data Science for Official Statistics:**

- **What it is:** A specialized UN body established to explore the use of big data and data science techniques for enhancing official statistical systems globally.
- **Established in:** 2014, under the **United Nations Statistical Commission (UNSC)**.
- **Aim:**
  - Investigate how big data can contribute to **monitoring and reporting Sustainable Development Goals (SDGs)**.
  - Address challenges in the use of non-traditional data sources for official statistics.
- **Functions:**
  - Develop global standards and best practices for integrating **big data** into official statistical systems.
  - Facilitate **international collaboration** on big data and data science.
  - Promote innovative use of non-traditional data sources, such as satellite imagery, IoT, and private sector data.
  - Provide technical support and guidance to member countries in modernizing their statistical processes.

### 4. De-notified Tribes

The denotified tribes (DNTs), semi-nomadic tribes (SNTs), and nomadic tribes (NTs) in India are facing significant challenges due to delays in implementing the **Idate Commission** recommendations.

#### **About Denotified Tribes (DNTs):**

- **Who they are:** Communities that were classified as "criminal tribes" under the **Criminal Tribes Act, 1871** during British rule and "denotified" after the Act's repeal in 1952.
  - Includes **1,526 communities**, with **269 yet to be categorized** as SC, ST, or OBC.
- **Committee involved:**
  - The **Idate Commission (2015)**, chaired by **Bhiku Ramji Idate**, submitted its report in 2017, recommending:
    - A **permanent commission** for DNTs.
    - A **caste census column** to count DNT populations.
    - A **sub-quota** for DNTs under SC/ST/OBC categories.
- **Criteria for DNTs:**
  - Historical branding as "criminal tribes."
  - Lack of formal categorization under SC, ST, or OBC.
  - Socio-economic deprivation and nomadic or semi-nomadic lifestyles.

#### **About SEED Scheme:**

- **What it is:** A **flagship welfare scheme** designed for the economic empowerment of DNT/NT/SNT communities.
- **Ministry:** Ministry of Social Justice and Empowerment.
- **Launched in:** February 2022.
- **Aim:** To provide assistance for improving the socio-economic conditions of DNT/NT/SNT communities.
- **Features:**
  - **Livelihood Support:** Financial aid for skill development and employment.

- **Education Assistance:** Scholarships for school and higher education.
- **Healthcare Access:** Subsidized healthcare services.
- **Housing Support:** Assistance for building or improving housing.

**5. Plasticizers Degradation**

Researchers at IIT Roorkee have developed a groundbreaking method to degrade plasticizers, specifically **diethyl hexyl phthalate (DEHP)**, using bacterial enzymes.

**About plasticizers degradation using bacterial enzymes:**

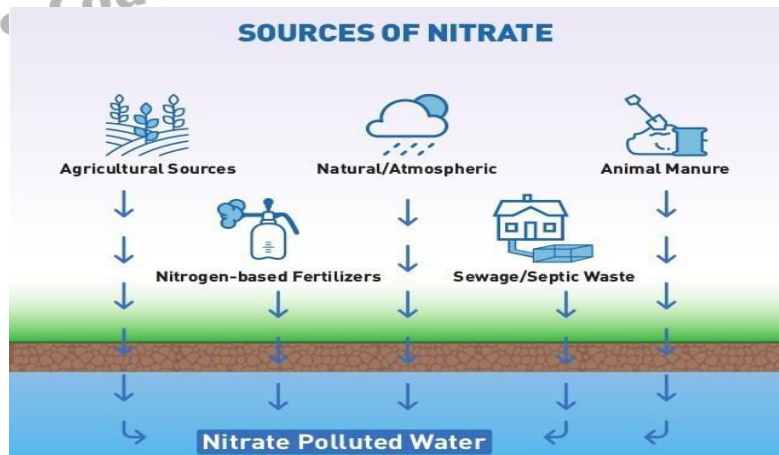
- **What it is:** A method using bacterial enzymes to break down high molecular weight plasticizers like DEHP, commonly found in plastics and personal care products.
- **Bacterial enzyme involved:**
  - **Esterase enzyme** from **Sulfobacillus acidophilus** for degrading DEHP into less harmful byproducts.
  - Additional enzymes from **Comamonas testosteroni** for complete conversion into **water** and **carbon dioxide**.
- **How it works:**
  - **Step 1:** DEHP is broken down into **mono-(2-ethylhexyl) phthalate (MEHP)** and **2-ethyl hexanol** using the esterase enzyme.
  - **Step 2:** Sequential enzymes convert MEHP to **phthalate**, then to intermediate compounds, ultimately producing **water** and **carbon dioxide** via bacterial metabolic pathways.
  - **Gene Integration:** Researchers aim to integrate all five enzyme genes into bacteria to enhance degradation efficiency.
- **Significance:**
  - **Environmental Impact:** Provides a sustainable method to degrade carcinogenic plasticizers.
  - **Pollution Control:** Reduces plasticizer contamination in water sources.
  - **Scalability:** Enzyme production on a large scale through **E. coli bacteria** makes the method feasible for widespread use.
  - **Advancement in Biotechnology:** Marks progress in enzyme engineering for addressing pressing environmental issues.
- **Limitations:**
  - **Current Lab Scale:** Method is primarily tested in controlled environments; field application needs optimization.
  - **Enzyme Stability:** Without bacterial integration, enzymes degrade quickly and need frequent replenishment.
  - **Time-Intensive Process:** Degradation rates could be slow for large-scale applications.

**6. Groundwater Contamination**

India faces a significant groundwater contamination issue, with nitrate being a major concern alongside other pollutants like fluoride, arsenic, and uranium.

**About Groundwater Contamination:**

- **What it is:** Contamination of underground water sources due to dissolved pollutants from **natural and human activities**, affecting water quality and usability.
- **Types of Contamination:**
  - **Nitrate Contamination:** From fertilizers like ammonium nitrate and urea, affecting oxygen-carrying capacity in blood and leading to algal blooms in water bodies.
  - **Other Contaminants:**
    - **Fluoride:** Leads to dental and skeletal fluorosis.
    - **Arsenic:** Causes skin lesions, cancer, and other chronic health issues.
    - **Uranium:** Linked to kidney toxicity and cancer.
    - **Iron and Ammonia:** Affect water taste and usability.
- **Criteria Standard of Measurement:**
  - **Nitrate:** Safe limit is **45 mg/l** in groundwater.
  - **Fluoride:** Permissible limit is **1.0 mg/l**.
  - **Uranium:** Acceptable levels are **30 ppb**.



- **Impacts:**
  - **Health Risks:** Conditions like **methemoglobinemia (blue baby syndrome)**, kidney and liver damage, and chronic diseases.
  - **Environmental Effects:** Eutrophication due to nitrate-induced algal blooms, harming aquatic ecosystems.
  - **Economic Consequences:** Increased healthcare costs and loss of agricultural productivity.
- **States with High Contamination:**
  - **Nitrate:** Rajasthan (49%), Karnataka (48%), Tamil Nadu (37%), and Madhya Pradesh (22.58%).

**ANSWER WRITING**

**Q. Swami Vivekananda's vision of India as 'Vishwa Guru' holds renewed relevance in today's fragmented world. Critically analyze how Vedantic principles can address contemporary global challenges while maintaining a balance between tradition and modernity.**

Swami Vivekananda envisioned India as a 'Vishwa Guru', a global leader rooted in Vedantic principles like universalism, harmony, and spiritual upliftment. In a world grappling with conflicts, climate crises, and moral dilemmas, these timeless ideals provide a pathway for addressing global challenges while maintaining a balanced synergy between tradition and modernity, ensuring sustainable progress.

Relevance of Swami Vivekananda's Vision of India as 'Vishwa Guru' in Today's Fragmented World

- **Universal Harmony:** Vivekananda's vision emphasizes universal harmony, urging nations to transcend divisions and work collaboratively to resolve global issues such as poverty, inequality, and climate change.  
**For example:** The **G20 Delhi Declaration (2023)** embodies this ethos, promoting harmony across people, prosperity, and the planet through inclusive policies.
- **Interconnectedness:** Vedantic teachings of oneness underscore that global crises like environmental degradation and pandemics affect all equally, necessitating collective action and shared responsibility.  
**For example:** India's **International Solar Alliance** demonstrates global collaboration for sustainable energy to combat climate change.
- **Ethical Leadership:** Swami Vivekananda's vision calls for leadership rooted in integrity and selflessness, crucial for addressing political polarization and ethical lapses worldwide.  
**For example:** India's commitment to **pharmaceutical equity** during the COVID-19 pandemic reflects ethical leadership by providing vaccines to developing countries.
- **Cultural Pluralism:** The philosophy of 'unity in diversity' promotes cross-cultural dialogue, vital for mitigating global conflicts arising from identity politics and xenophobia.  
**For example:** India's **global diaspora diplomacy** fosters harmony by celebrating cultural diversity through international festivals and events.
- **Role of Youth:** Vivekananda placed immense faith in empowering youth to lead transformative changes globally by blending innovation with ethical values.  
**For example:** The **UNESCO Mahatma Gandhi Institute of Education for Peace** promotes youth-led peacebuilding initiatives worldwide.

**Vedantic Principles Addressing Contemporary Global Challenges While Balancing Tradition and Modernity**

- **Oneness with Nature:** Vedanta teaches harmony with nature, offering solutions to combat environmental degradation through sustainable practices and ecological conservation.  
**For example:** India's **National Mission for Clean Ganga** integrates traditional reverence for rivers with modern technology for river rejuvenation.
- **Equitable Growth:** The Vedantic ideal of selflessness fosters inclusive development, ensuring economic policies address inequalities and uplift marginalized communities globally.  
**For example:** India's **Jan Dhan Yojana** promotes financial inclusion by providing access to banking for underserved populations.
- **Integrating Science and Spirituality:** Vedanta reconciles spiritual wisdom with scientific progress, enabling innovations aligned with ethical and ecological values.  
**For example:** **Ayurgenomics**, combining Ayurveda and genomics, represents a balance between traditional healthcare and modern biotechnology.
- **Conflict Resolution:** The Vedantic belief in universal brotherhood offers frameworks for resolving geopolitical tensions and fostering peace through dialogue and mutual respect.  
**For example:** India's role in mediating peace talks, such as during the **Russia-Ukraine conflict**, reflects Vedantic diplomacy in action.
- **Preservation of Cultural Heritage:** Vedanta supports maintaining traditions while evolving with modernity, promoting cultural heritage as a tool for global harmony.  
**For example:** UNESCO's recognition of **Yoga as Intangible Cultural Heritage** underscores its modern relevance rooted in ancient Indian traditions.

Vedantic principles can help reshape the global narrative by promoting universal brotherhood, environmental stewardship, and equitable growth. By embracing Swami Vivekananda's vision, India can exemplify how spiritual wisdom complements modern innovation, re-establishing its role as Vishva Guru in solving the world's challenges through a harmonious blend of traditional ethos and contemporary solutions.

**MCQ**

1. Regarding the need for the Silver Notice, consider the following statements:
  1. It helps combat the growing challenge of laundering illicit wealth across borders.
  2. The notice facilitates asset recovery under national laws of member countries.
  3. It replaces Interpol's Red Notice for criminal investigations.
 How many of the above are correct?
  - a) Only one
  - b) Only two**
  - c) All three
  - d) None
2. Cuba is geographically situated at the confluence of which three water bodies?
  - a) Atlantic Ocean, Caribbean Sea, and Gulf of Mexico**
  - b) Pacific Ocean, Gulf of Mexico, and Caribbean Sea
  - c) Atlantic Ocean, Gulf of California, and Caribbean Sea
  - d) Caribbean Sea, Indian Ocean, and Atlantic Ocean
3. Which of the following Republic Day craft products is directly linked to a traditional art form associated with playing cards?
  - a) Kalamkari Bamboo Box
  - b) Ganjifa Art Magnet**
  - c) Screwpine Leaf Bookmark
  - d) Ikat Pochampalli Cover
4. Consider the following statements about the Scorpene-class submarines under Project P-75:
 

Statement I: These submarines are equipped with advanced stealth technologies to evade sonar detection.

Statement II: Their diesel-electric propulsion system provides unlimited underwater endurance.

 Which one of the following is correct in respect of the above statements?
  - a) Both Statement-I and Statement-II are correct, and Statement-II is the correct explanation for Statement-I.
  - b) Both Statement-I and Statement-II are correct, but Statement-II is not the correct explanation for Statement-I.
  - c) Statement-I is correct, but Statement-II is incorrect.**
  - d) Statement-I is incorrect, but Statement-II is correct.
5. The Maternal Mortality Ratio (MMR) is defined as:
  - a) The number of live births per 1,000 women of childbearing age in a given year.
  - b) The number of maternal deaths per 100,000 live births within a specific time period.**
  - c) The percentage of women who die during childbirth annually.
  - d) The number of maternal deaths per 1,000 pregnancies in a given year.
6. The purpose of issuing 'Silver Notice' by the Interpol is to:
  - a) Trace and recover criminal assets laundered across international borders.**
  - b) Locate missing persons or identify individuals unable to identify themselves.
  - c) Issue an international arrest warrant for fugitives wanted for extradition.
  - d) Warn about imminent threats to public safety, such as dangerous objects or events.
7. With reference to the UN Committee of Experts on Big Data and Data Science for Official Statistics (UN-CEBD), consider the following statements:
  1. It is a specialized body established by the United Nations Statistical Commission.
  2. It aims to replace traditional statistical methods with artificial intelligence-based models.
  3. It emphasizes the use of big data for achieving Sustainable Development Goals (SDGs).
 How many of the statements given above are correct?
  - a) Only one
  - b) Only two**
  - c) All three
  - d) None
8. With reference to Hoollongapar Gibbon Wildlife Sanctuary, consider the following statements:
  1. It is located in Nagaland.
  2. It houses India's only ape species.
  3. It is the largest sanctuary in Northeast India.
 Which of the statement(s) given above is/are correct?
  - a) 1 only
  - b) 2 only**
  - c) 1 and 3 only
  - d) 2 and 3 only
9. Which one of the following treaties laid the foundation for the 'Tin Bigha Corridor Agreement' between Indian and Bangladesh?
  - a) The Ganga Water Treaty
  - b) The Land Boundary Agreement**
  - c) The Indus Waters Treaty
  - d) The Chittagong Hill Tracts Peace Accord
10. The main objective of 'Bharat Climate Forum' is:
  - a) To unify stakeholders from policy, industry, finance, and research to accelerate cleantech manufacturing in India.**
  - b) To prioritize urban infrastructure development.
  - c) To promote coal mining in India
  - d) None of the above