



## **DAILY CURRENT AFFAIRS 11-09-2024**

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## Union Health Secretary Releases Health Dynamics Report 2022-23

**Syllabus: GS-2; Health**

### **Context**

- *Union Health Secretary Shri Apurva Chandra released a report called the “Health Dynamics of India (Infrastructure and Human Resources) 2022-23.”*

### **Key Highlights**

- **Health System Strengthening:**
  - *The report emphasizes improvements in healthcare infrastructure, including increased availability of medical facilities and personnel in both urban and rural areas.*
  - *There has been a notable enhancement in the implementation of telemedicine and digital health technologies.*
- **Disease Control and Prevention:**
  - *The report outlines significant progress in the control and prevention of communicable diseases such as tuberculosis, malaria, and HIV/AIDS.*
  - *Vaccination drives have been expanded, with increased coverage rates for childhood and adult vaccines.*
- **Healthcare Access and Equity:**
  - *Efforts have been made to improve healthcare access for marginalized and vulnerable populations, including low-income groups and rural communities.*
  - *The report details initiatives aimed at reducing disparities in healthcare access and outcomes.*
- **Health Outcomes and Statistics:**
  - *There are updates on key health indicators such as maternal and child health, life expectancy, and mortality rates.*
  - *The report highlights both progress and areas needing further attention, such as non-communicable diseases and mental health.*
- **Policy and Program Initiatives:**
  - *New policies and programs introduced over the year are discussed, including those related to health insurance, primary healthcare, and emergency response systems.*
  - *The report reviews the impact of these initiatives on the overall health landscape.*
- **Challenges and Recommendations:**

- *The report identifies ongoing challenges in the health sector, such as healthcare financing, workforce shortages, and quality of care.*
- *Recommendations for addressing these challenges are provided, focusing on policy adjustments, increased funding, and strategic planning.*
- **Future Directions:**
  - *Strategic goals for the upcoming year are outlined, including plans to enhance healthcare delivery, integrate new technologies, and promote health and wellness at the community level.*
  - *This report serves as a critical tool for policymakers, health professionals, and the public to understand the current state of the health sector and to guide future health interventions and reforms.*

## **FAO Food Price Index**

### **Syllabus: GS-3; Global Hunger Index (GHI), Food Security, Agricultural Pricing Policies**

#### **Context**

- *The Food and Agriculture Organization of the United Nations (FAO) reported that the world food commodity prices decreased slightly in August 2024.*

#### **More about the news**

- *The FAO Vegetable Oil Price Index rose by 0.8 per cent, reaching a 20-month high, driven by increases in international palm oil prices.*
- *The FAO Dairy Price Index increased by 2.2 per cent, with the whole milk powder, international cheese, and butter quotations all rising due to various factors.*
- *The FAO Meat Price Index declined by 0.7 per cent, while poultry, pig, and ovine meat prices all decreased. World bovine meat prices, on the other hand, increased slightly.*
- *The FAO Sugar Price Index declined by 4.7 per cent, reaching its lowest level since October 2022, but there were sharp sugar price increases in late August 2024 due to concerns about the impact of fires on sugarcane fields in Brazil.*

#### **What is FAO Food Price Index (FFPI)?**

- **Definition:** *The FAO Food Price Index measures the monthly change in international prices of a basket of food commodities.*

- **Purpose:** *It is designed to help policymakers, market analysts, and international organizations monitor food price trends to manage food security and economic policies globally.*
- **Launch:** *Introduced in 1996 by the FAO.*

### Composition of the Index

*The FFPI is composed of five major commodity group price indices:*

- **Cereals:** *Includes wheat, rice, maize, barley, and sorghum.*
- **Vegetable Oils:** *Focuses on oils like palm, soy, sunflower, and rapeseed.*
- **Dairy:** *Milk, cheese, and butter prices.*
- **Meat:** *Includes poultry, bovine, pork, and ovine meat.*
- **Sugar:** *Reflects sugar prices globally.*

### Calculation Method

- **Weighting:** *Each commodity group has a different weight in the overall index based on their global trade share.*
- **Base Year:** *The FFPI uses 2014–2016 as the base period (index = 100) for comparison.*
- **Monthly Updates:** *The index is updated monthly, providing regular insights into food price volatility.*

### Importance of FFPI

- **Global Food Security:** *High food prices can lead to food insecurity, especially in low-income countries, making the FFPI a vital tool for understanding the global food situation.*
- **Inflationary Impact:** *Rising food prices contribute to overall inflation, especially in countries where food has a significant share of the consumption basket.*
- **Commodity Markets and Trade:** *The FFPI impacts international trade policies and agreements, especially for countries that are major food importers or exporters.*

### FAO's Role

*The FAO not only publishes the FFPI but also provides analysis on the factors driving changes in food prices, including:*

- **Supply and Demand Dynamics:** *Crop yields, production levels, and consumption patterns.*
- **Weather and Climate:** *Adverse weather events (like droughts and floods) affecting harvests.*
- **Global Market Factors:** *Trade disruptions, currency fluctuations, and policy changes (such as tariffs or subsidies).*

- **Pandemics and Conflicts:** *Events like the COVID-19 pandemic and geopolitical tensions have had significant effects on food prices.*

## **NASA's Europa Clipper Mission**

### **Syllabus: GS-3; Science & Technology**

#### **Context**

- *Recently, NASA has given the green light for next month's launch of the Europa Clipper mission, set to explore Jupiter's moon Europa, following a review of the spacecraft's resilience to intense radiation.*

#### **About**

- *The Europa Clipper Mission is a flagship mission by NASA aimed at exploring Jupiter's moon Europa, one of the most intriguing bodies in our solar system.*

#### **Key Objectives**

- **Search for Signs of Habitability:** *Europa is believed to have a vast subsurface ocean beneath its icy crust. The primary goal is to assess the moon's habitability by studying the ocean's composition, depth, and salinity.*
- **Study of Surface and Ice Shell:** *The mission will analyze Europa's surface, especially the icy crust that covers the ocean. Scientists aim to understand the thickness and properties of the ice shell, as well as how the ocean interacts with the surface.*
- **Magnetic Field Analysis:** *Europa's interaction with Jupiter's magnetic field will be studied, providing insights into the characteristics of its ocean.*
- **Geology and Geophysical Features:** *The mission will map Europa's surface in detail, investigating features like cracks, ridges, and geysers, and providing clues about the geological history and tectonic activity of the moon.*

#### **Instruments on Board**

*The Europa Clipper will carry a suite of advanced scientific instruments designed to gather crucial data:*

- **Ice-Penetrating Radar:** *To measure the thickness of the ice shell.*
- **Thermal Imaging Camera:** *To detect warmer areas, possibly indicating water plumes.*

- **Mass Spectrometer:** *To analyze the composition of Europa's thin atmosphere and potential plumes.*
- **Magnetometer:** *To study Europa's magnetic field and infer the depth and salinity of the ocean.*

### Why is Europa Important?

- **Potential for Life:** *The mission's most exciting prospect is finding conditions favorable for life. Europa's ocean, kept warm by tidal heating from Jupiter's gravity, could be one of the best places in the solar system for microbial life.*
- **Comparative Planetology:** *Studying Europa helps scientists understand more about icy worlds in general, which are common across the solar system, particularly in the outer regions.*

## **Keoladeo National Park**

### Syllabus: GS-3; Biodiversity

#### Context

- *India's first study on 'teal carbon', undertaken at Keoladeo National Park (KNP) in Rajasthan's Bharatpur district, has highlighted the significance of wetland conservation to address the challenges of climate adaptation and resilience.*
- *The pilot project sought to develop holistic nature-based solutions to address climate change.*

#### About

- **Location:** *Bharatpur district, Rajasthan, near the western border of Uttar Pradesh.*
- **Area:** *Spread over approximately 29 square kilometers.*
- **Recognition:** *UNESCO World Heritage Site: Declared in 1985.*
- **Ramsar Site:** *Recognized as a Ramsar Wetland of International Importance.*

#### Historical Significance

- *It was initially created as a duck-hunting reserve by the Maharaja of Bharatpur in the 18th century.*
- *Named after the **Keoladeo (Shiva) temple** located within the park.*

## Flora

- The park is a **semi-arid biotype** with grasslands, swamps, marshes, and scrub vegetation.
- The vegetation types vary between **dry deciduous forests, swamps, and wetlands.**

## Fauna

- **Birdlife:** Known for hosting over 370 species of birds, including migratory birds like the Siberian crane, which used to visit in winters.
- It is a key wintering ground for several aquatic birds from Afghanistan, Turkmenistan, China, and Siberia.
- Other notable species: Painted stork, white ibis, spoonbill, and several species of ducks and geese.
- **Mammals:** The park is also home to mammals like sambar, chital, nilgai, wild boar, and jackals.

## Conservation Efforts

- After the decline of hunting, the park has been focused on conservation efforts.
- There are water management practices, as the wetlands rely on monsoon rains and artificial water sources for their survival.
- The park faces issues related to water scarcity and invasive species like the *Prosopis juliflora* (an exotic plant).

## Teal carbon study

- Teal carbon refers to **carbon stored in non-tidal freshwater wetlands**, encompassing carbon sequestered in vegetation, microbial biomass, and dissolved and particulate organic matter.
- Though these wetlands play a crucial role in regulating greenhouse gases, they are vulnerable to degradation from pollution, land use changes, water extraction, and landscape modifications.
- 'Teal carbon' being a colour-based terminology reflects the classification of the organic carbon based on its functions and location rather than its physical properties.
- As opposed to teal carbon, black and brown carbon are primarily produced by incomplete combustion of organic matter from sources such as wild fires, fossil fuel combustion, and industrial activities. They contribute to global warming.

## **Africa Urban Forum (AUF) 2024**

### **Syllabus: GS-3: Climate Change – Organisations.**

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### Context:

- *The Africa Urban Forum (AUF), held from September 4-6, 2024, in Addis Ababa, tackled the rapid urbanisation sweeping across the continent.*
- *As urbanisation was described as an "irreversible trend," the forum focused on managing it in a way that promotes sustainable, fair, and economically strong cities.*
- *The key discussions revolved around **urban planning, resource mobilisation, and climate resilience.***

### Importance of Urban Planning

- *With more people moving to cities, proper planning is crucial to avoid problems like **housing shortages, inadequate infrastructure, and rising inequality.***
- *Urban planning helps cities accommodate growing populations by ensuring equal access to essential services like **water, electricity, and transportation.***
- ***Without strategic planning, cities risk becoming overwhelmed by their growth.***

### Investment Needs for Growing Cities

- *Building the infrastructure for Africa's expanding cities requires significant investments—around **\$130 billion annually.***
- *While this is a large sum, investments are expected to generate significant returns, with each dollar potentially bringing back **up to \$4** in economic benefits.*

*To meet this financial demand, various funding strategies were discussed, including:*

- ***Public-private partnerships (PPPs):** Sharing costs between governments and private companies.*
- ***Development finance:** Loans from international organisations focused on sustainable development.*
- ***Green bonds:** Loans for eco-friendly projects.*
- ***Impact investing:** Investments aiming for financial gains alongside positive social outcomes.*
- ***Crowdfunding:** Raising funds from a broad base of small contributors.*

### Mobilising Resources for City Growth

- *A coordinated approach is necessary to secure the resources for urban development. Governments must ensure transparency in how public funds are used and align investments with local needs, adhering to the **subsidiarity principle**—which states that decisions should be made as close to the community as possible.*

### Housing Policies and Climate Resilience



- *The forum stressed the need for housing policies that support low-income families, especially given the rapid urban expansion.*
- *Simultaneously, cities must become **climate-resilient** to handle the increasing risks posed by climate change.*
- *Urban areas, being **climate hotspots**, face heightened dangers from extreme weather, which can disrupt livelihoods, housing, and access to services.*
- *Cities must focus on both **mitigation** (reducing the causes of climate change) and **adaptation** (preparing for its effects).*

### **Collaborative Solutions for Sustainable Growth**

- *The AUF aimed to foster collaboration across African governments to harness the opportunities that urbanisation brings.*
- *By working together, countries can diversify their economies, strengthen urban resilience, and ensure that African cities develop in a sustainable and inclusive manner.*