DAILY CURRENT AFFAIRS 29-02-2024

GS-2

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GS-3

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Lokpal

Syllabus: GS-2; Statutory Bodies

Context

- *Former Supreme Court judge,* **Justice A.M. Khanwilkar,** *has been appointed as the* **Lokpal chairperson,** *one and half years after he retired from the apex court.*
- *The Rashtrapati Bhavan has also announced the appointment of former high court judges Lingappa Narayana Swamy, Sanjay Yadav and Ritu Raj Awasthi as judicial* **members of the Lokpal**.
- **Non-judicial members** *Sushil Chandra, Pankaj Kumar and Ajay Tirkey were also appointed.*

About

- *A Lokpal is an* **anti-corruption authority or body of ombudsman** *who represents the public interest in the Republic of India.*

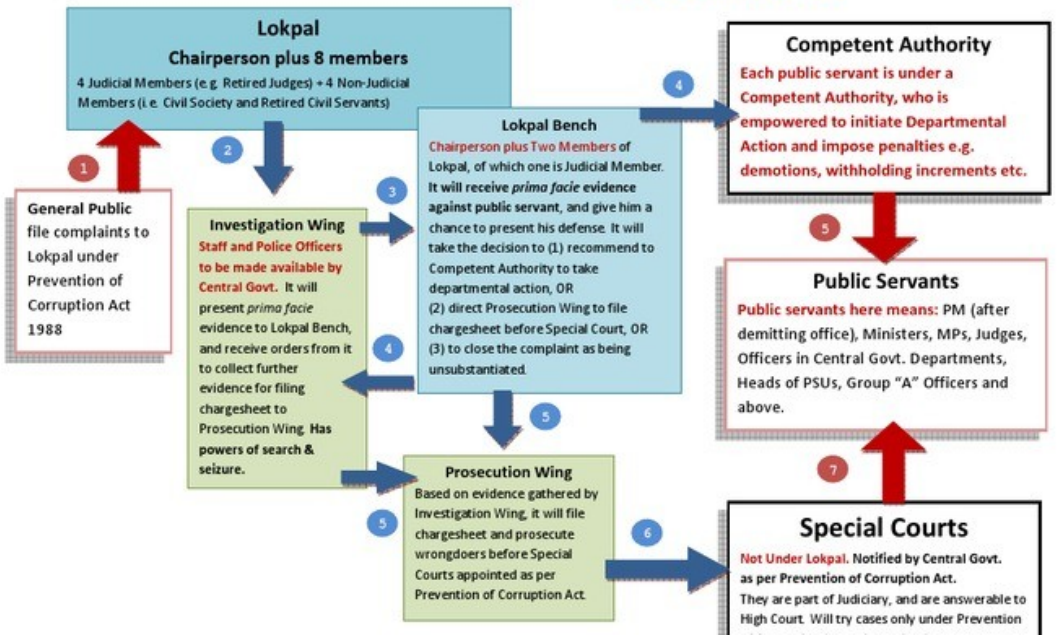
Jurisdiction

- *The Lokpal has jurisdiction over* **central government** *to inquire into allegations of corruption against its public functionaries and for matters connected to corruption.*

Background

- **The Lokpal and Lokayuktas Act was passed in 2013** *with amendments in parliament, following the Jan Lokpal movement led by Anna Hazare in 2010.*
- *The Lokpal is responsible for enquiring into corruption charges at the national level while the Lokayukta performs the same function at the state level.*

Structure and Working



Removal

- **The President** *may remove a member on the opinion of the Chief Justice on grounds of bias, corruption, insolvency, paid employment, or infirmity.*
- *The President removes members on the recommendation of the Supreme Court made within 3 months of a complaint.*

Need for lokpal

- *The Lokpal and Lokayuktas Act of 2013 established the Lokpal* **to investigate allegations of corruption against public officials and ensure accountability**.

Limitations

- **Limitation period:** *A complaint cannot be made after seven years from the date of the alleged offense.*
- **Emphasis on form:** *The act emphasizes the form of the complaint rather than its substance.*
- **Punishment:** *The act provides for severe punishment for false or frivolous complaints, which may deter people from coming forward with valid complaints.*
- **Anonymous complaints:** *Anonymous complaints are not allowed.*
- **Legal assistance***: The public servant against whom the complaint is filed is provided with legal assistance.*
- *The Lokpal cannot proceed against any* **public servant** *without a complaint.*
- *The Lokpal does not have jurisdiction over* **allegations of corruption relating to international relations, security, public order, atomic energy, and space.**

- *The Lokpal does not have jurisdiction over anything said in Parliament or a vote given there.*

Household Consumption Expenditure Survey 2022-23

Syllabus: GS-3: Indian Economy – demand and consumption pattern.

Context:

- *This is second part of Household Consumption Expenditure Survey 2022-23. First part article is available on 26-02-2024 current affairs article.*

Major findings of the survey:

How has the share of spending on food in India changed over the last 20-odd years?

Trend in Spending on Food in India Over 20 Years

- *The share of expenditure on food has gradually declined.*
- *Both urban and rural households have experienced this trend.*

Significant Milestones in Food Expenditure

- **Rural India:** *Expenditure on food dropped below 50% for the first time.*
- **Urban India:** *Expenditure on food fell below 40% for the first time.*

Specific Changes in Rural India

- *1999-2000: Food expenditure was* **59.4% of total consumption**.
- *First decade of the 21st century:* **Hovered around 50%.**
- *2022-23: Food expenditure* **decreased to 46.38%.**

Specific Changes in Urban India

- *1999-2000: Food expenditure was* **48.06% of total consumption**.
- *2022-23: Food expenditure* **decreased to 39.17%.**

Implications of Decreasing Food Expenditure

- *More money available for other expenses like consumer durables, clothing, fuel, and entertainment.*
- *Indicates an improvement in living standards and aspirations for higher quality of life.*

Within foods, what are Indians now consuming?

Shifts in Food Consumption Patterns in India

- **Decrease in Cereal Consumption**
  - **Rural households:** *From almost 22% in 1999-2000 to 4.91% in 2022-23.*
  - **Urban households:** *From 12% in 1999-2000 to 3.64% in 2022-23.*

Increase in Consumption of High-Value/Nutritional Items

- *Eggs, Fish, and Meat*
  - *Rural households: Spending increased significantly.*
  - *Urban households: Relatively stable increase.*
- *Fruits and Vegetables*
  - *Rural households: Spending increased notably.*
  - *Urban households: Moderate increase.*

Comparison of Expenditure

- **1999-2000**
  - *Rural households: 11.21% spent on high-value/nutritional items.*
  - *Urban households: 10.68% spent on high-value/nutritional items.*
- **2022-23**
  - *Rural households: Spending increased to 14%.*
  - *Urban households: Spending slightly increased to 11.17%.*
- *Implications of Changes*
  - *Rural households show a more pronounced shift towards higher-value, nutritious food items compared to urban households.*
  - *This indicates a potential improvement in dietary quality and awareness of nutrition.*

Is there a need to review the inflation basket? What do the average MPCE data show?

Need for Reviewing the Inflation Basket:

- **Inflation calculation** *requires an accurate representation of consumption patterns.*
- *The* **current CPI-based inflation basket** *was decided in 2012 and may not reflect current consumption trends.*

Discrepancies in CPI Basket and Actual Spending:

- **Rural households spend less on cereals** *and more on food overall compared to the CPI basket.*
- **Urban households spend more on food** *and certain specific items like pan, tobacco, and entertainment compared to the CPI basket.*

Changes in Spending Patterns:

- *Both rural and urban households have seen an increase in spending on rent.*

Difference between Imputed and Non-Imputed Average MPCE Data:

- *NSSO provided MPCE data including the imputed value of free items from social welfare programs.*
- *Rural and urban households' MPCE including free items is higher compared to MPCE without them.*

Beneficiary Analysis of Imputed Free Items:

- *In rural households,* **the top 5% population** *benefited more than the bottom 5% in absolute terms.*
- *However,* **in urban households**, *the bottom fractiles (0-5%, 5-10%, 10-20%) benefited the most in both percentage and absolute terms.*

Conclusion:

- **Reviewing the inflation basket is necessary** *to accurately reflect current consumption patterns.*
- **Imputed MPCE data highlight disparities** *in benefit distribution, with urban lower fractiles benefiting more than rural lower fractiles.*

Which states have a lower standard of living compared with the national average?

Here are the states/UTs with a lower standard of living compared to the national average:

- **Manipur:**
  - *Urban-Rural Difference: Rs 520 (11.92% of rural MPCE)*
- **Kerala:**
  - *Urban-Rural Difference: Rs 1,154 (19.48% of rural MPCE)*
- **Goa:**
  - *Urban-Rural Difference: Rs 1,367 (18.55% of rural MPCE)*
- **Puducherry:**
  - *Urban-Rural Difference: Rs 1,116 (16.93% of rural MPCE)*
- **Lakshadweep:**
  - *Urban-Rural Difference: -Rs 420 (-7.12% of rural MPCE)*

- Note: Negative difference indicates urban spending is lower than rural spending.

National Science Day

Syllabus: GS-3: Science and Technology – Indian Scientists.

Context:

- **Prime Minister Narendra Modi on February 28** *greeted people on* **National Science Day** *and said his government is continuously working to encourage research and innovation among the youth.*

About National Science Day:

- *National Science Day is observed to commemorate the discovery of the* **'Raman effect' by scientist C.V. Raman.**
- *In 1986, the National Council for Science and Technology Communication (NCSTC) asked the Government of India to designate February 28 as National Science Day.*

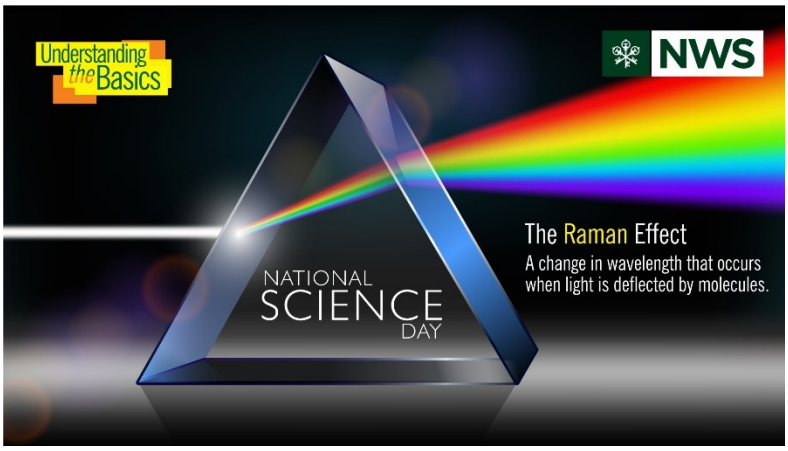
About C.V. Raman:

- **Sir Chandrasekhara Venkata Raman** *was an Indian physicist known for his work in the field of light scattering.*
- **Using a spectrograph** *that he developed, he and his student K. S. Krishnan discovered that when light traverses a transparent material, the deflected light changes its wavelength and frequency.*
- *This phenomenon, a hitherto unknown type of scattering of light, which they called "***modified scattering"** *was subsequently termed the* **Raman effect or Raman scattering**.
- *Raman received the* **1930 Nobel Prize in Physics** *for the discovery and was the first Asian to receive a Nobel Prize in any branch of science.*

About Raman scattering:

- *In physics,* **Raman scattering or the Raman effect***is the* **inelastic scattering of photons** *by matter, meaning that there is both an exchange of energy and a change in the light's direction.*

- *Typically, this effect* **involves vibrational energy being gained by a molecule** *as incident photons from a visible laser are shifted to lower energy.*
- *This is called normal* **Stokes-Raman scattering.**



Raman spectroscopy

- *Raman spectroscopy is a* **spectroscopic technique** *typically used to determine vibrational modes of molecules, although rotational and other low-frequency modes of systems may also be observed.*
- **Raman spectroscopy** *is commonly used in chemistry to provide a* **structural fingerprint by which molecules can be identified.**
- *Raman spectroscopy relies upon* **inelastic scattering of photons**, *known as Raman scattering.*
- *A* **source of monochromatic light**, *usually from a laser in the visible, near infrared, or near ultraviolet range is used, although X-rays can also be used.*
- *The* **laser light interacts with molecular vibrations**, *phonons or other excitations in the system, resulting in the energy of the laser photons being shifted up or down.*
- *The* **shift in energy gives information** *about the vibrational modes in the system.* **Infrared spectroscopy** *typically yields similar yet complementary information.*

Applications:

- *Raman spectroscopy is* **used in chemistry** *to identify molecules and study chemical bonding and intramolecular bonds.*
- *In* **solid-state physics**, *Raman spectroscopy is used to characterize materials, measure temperature, and find the crystallographic orientation of a sample.*
- **In nanotechnology**, *a Raman microscope can be used to analyze nanowires to better understand their structures, and the radial breathing mode of carbon nanotubes is commonly used to evaluate their diameter.*
- *Raman spectroscopy has a wide variety of* **applications in biology and medicine**.

- *Raman spectroscopy has been used in several research projects as a means to detect* **explosives from a safe distance using laser beams**.

India's first indigenous Hydrogen fuel cell ferry

Syllabus: GS-3; Indigenous Technology

Context

- *Prime Minister Narendra Modi flagged off India's first indigenously built hydrogen fuel cell ferry boat in virtual mode.*

About

- *The vessel has been built at the* **Cochin Shipyard**.
- *The pilot vessel is a 24-metre catamaran which can carry 50 passengers with fully air-conditioned passenger space.*
- *It will make urban mobility smooth and easy, according to a release issued by Cochin Shipyard Limited (CSL).*
- *The hydrogen cell-powered inland waterway vessel under the* **Harit Nauka initiative.**

Significance

- *The vessel built at CSL underscores the pioneering step for embracing clean energy solutions and aligning with the nation's net-zero commitments.*
- **Zero emissions:** *The ferry has zero emissions and minimal noise.*
- **Energy efficiency:** *The ferry is energy efficient.*
- **Clean energy solutions:** *The ferry is a pioneering step towards embracing clean energy solutions.*
- **Net-zero commitments:** *The ferry aligns with India's net-zero commitments.*
- **Maritime technology:** *The ferry is a noteworthy stride towards cutting-edge maritime technology.*

More to know

- **The V.O.Chidambaranar Port is also the first Green Hydrogen Hub Port** *of the country and the projects include a desalination plant, hydrogen production and bunkering facility.*

Hydrogen fuel cell

- *A hydrogen fuel cell is an* **electrochemical system** *that* **generates electricity by combining hydrogen and oxygen atoms.**
- *The process is similar to a battery, but a fuel cell is an energy converter rather than a storage device.*

Donkey skin trade

Syllabus: GS-3; Environment and Ecology, Concerns, Conservation, International Organisations

Context

- *A historic* **ban on the trade in donkey skin** *has been agreed upon by the African heads of state. This agreement, announced on the concluding day of the* **African Union summit** *in Ethiopia, outlawed killing of donkeys in the African continent for their skin.*
- *This is a significant outcome following the* **Dar es Salaam declaration** *adopted at the first* **AU-IBAR Pan-African Donkey Conference.**

WHAT IS EJIAO?

- *Ejiao (pronounced uh-jee-ow), also known as 'colla corii asini' or* **'donkey-hide glue', is a key ingredient in traditional Chinese medicine**.
- *It is produced from the collagen extracted from donkey skin.*
- *The collagen is mixed with herbs and other ingredients to* **create bars, pills or liquids for consumable goods or beauty products.**

Booming demand, but a limited supply

- *The ejiao industry has experienced significant growth over the past decade.*
- *Between 2013 and 2016, the annual production of ejiao increased from 3,200 to 5,600 tonnes, a yearly growth of over 20%.*
- *Industry reports show that the production of ejiao increased by 160 per cent between 2016 and 2021.*
- *If current trends continue, this will increase by 200 per cent by 2027.*
- *It is estimated that the ejiao industry now requires a minimum of 5.9 million donkey skins to keep up with the latest demand figures.*
- *The ejiao industry now relies on the global trade in donkey skins, feeding into this animal welfare and humanitarian emergency.*

The impacts of a limited supply of donkeys

- *The global donkey skin trade has many far-reaching catastrophic repercussions.*
- *Donkeys are suffering, and their* **populations are being decimated**.
- *Communities are losing treasured companions and face risks to their health and local ecosystems, and criminals are capitalising on legal ambiguities for their own ends.*