



POLITY

1. India to ratify amended version of Kyoto Protocol

- The Union Cabinet gave its approval to ratify the deal that is set to expire in 2020.
- Kyoto protocol is an international agreement to reduce the emissions of greenhouse gases.
 - The 1997 Kyoto Protocol came into effect in 2005.
 - It obligated the rich and industrialized countries to reduce emissions by 5.2% of 1990 levels during the 2008-2012 periods.

Doha Amendment

- The Doha Amendment established a second commitment period (2013–20) for the Kyoto Protocol.
- Until now, 75 countries have ratified the so called Doha Amendment of the Kyoto Protocol.
 - The 144 countries ratification needed to bring it into force.

Limitations

- The refusal of the U.S., the second largest polluter, to be part of the Protocol and lack of commitments by Canada, Japan and other major developing countries meant that global emissions actually rose during this period.

Effects on India

- Implementation of **Clean Development Mechanism (CDM)** projects under this commitment period in accordance with sustainable development priorities will attract some investments in India as well.
- Developing countries like India have no mandatory mitigation obligations or targets under the Kyoto Protocol.
- The Kyoto Protocol incentivized several firms in India to retrofit their polluting plants with newer technology in the hope of earning carbon credits.
- However after an initial spike, **carbon credit prices** that could be traded in emission-trading markets like shares have crashed to rock-bottom prices.

2. 69% of political funds from unknown sources

- A report on funding of political parties by Association for Democratic Reforms (ADR) says the income of national parties from unknown sources increased by 31.

Party wise distribution of the increase in income, ADR Report

- The total income of national and regional political parties between 2004-05 and 2014-15 stood at 11,367 crore, with the highest of 3,982 crore being the **Congress's** share.
- However, 69% of the income of these parties was from unknown sources.
- The income of national parties from unknown sources increased by 313% during the decade.
- For the regional parties, it went up by 652%.
- The income from other known sources, such as the sale of assets, membership fees, bank interest, the sale of publications and party levy, was about 15% of the total.

Voluntary contributions

- The total donations above 20,000 per entry, for which the national parties are to declare the sources, was about 1405.19 crore.
- BJP topped the list for declaring the maximum of 918 crore voluntary contributions in the category.
- The Income-Tax returns of 42 of the 51 regional parties analysed were unavailable for at least one financial year.

Recommendations of ADR

- The full details of all donors should be made available for public scrutiny under the RTI.
- Some countries where this is done include **Bhutan, Nepal, Germany, France, Italy, Brazil, Bulgaria, the United States and Japan.**
- In none of these countries it is possible for almost 75% of the source of funds to be unknown.
- Any organization that receives foreign funding should not be allowed to support or campaign for any candidate or political party.

Recommendations of Central Information Commission

- In 2013, the Central Information Commission ruled that political parties were covered under the **Right to Information Act.**
- It was pointed out that they got tax exemptions, land allotments and free airtime on state-owned media, in effect benefiting significantly from the exchequer.
- It would mean the list of donors, regardless of size of contribution, is open to public scrutiny.

- For this, parties would have to maintain records of small donors as well.
- **State funding**, perhaps partial, of elections is another solution to reduce the dependency on contributions, though the financial implications of this needs careful consideration.
- A **regulatory authority** can be established to receive authentic reports on political funding, scrutinize them and put them in the public domain.
- Transparency in funding is essential to ensuring clean, democratic governance.

Recommendations of Election Commission

- Tax exemption should be awarded only to those political parties which contest and win seats in Lok Sabha or Assembly elections.
- The details of all donors who donate above 2,000 should be made public.
- Scrutiny of the political party's financial documents should be conducted annually by a body approved by the **EC** and the **Comptroller and Auditor General** for greater transparency and accountability.

3. India on transparency list for failing to curb big corruption

Annual Index of Transparency International

- A major international index of corruption and transparency has placed **India** on the watch list for its inability to curb mega corruption scandals and petty bribery.
- **South Asia** had performed poorly.
- **Bangladesh** at 27th and **Nepal** at 29th positions were slotted in the highly corrupt section.
- **Pakistan**, at 32, also came in the red zone.
- **Afghanistan** ranked 15th was in the "highly corrupt" list with **South Sudan, North Korea and Libya**.

Annual Index of Transparency International on India

- It placed **India** with **Brazil** and **China** in the **40th** position.
- India's condition showed growth with inequality.
- It reiterates the state's inability to effectively deal with petty corruption and large-scale corruption scandals.
- The impact of corruption on poverty, illiteracy and policy brutality showed that along with the economy inequality is also growing.

Reasons :

- The government had not done enough on the issue of **Lokpal** and **whistleblower protection**.

- The **demonetization** process is the latest indicator of the lack of transparency in the system, where even the **Reserve Bank of India** is not able to spell out the exact details of the operation.
- Growth with inequality legitimizes corruption.

INTERNATIONAL RELATIONS

1. UAE signals a Look East policy

Military modernization

- The UAE will want its troops in the Republic Day parade to be viewed as the indicator of the UAE's growing power in the Indian Ocean.
- These troops embody the UAE and **GCC's** new 'Look East' policy of engaging Asia as a counterbalance to the West.
- The UAE has been carrying out military modernization in recent years and, according to **SIPRI**, was one of the five biggest arms importers in the world between 2011 and 2015.
- Alongside Qatar, the UAE has spread out to several conflict zones in the world in a show of Arab assertion.
- This presence forms part of a wider GCC effort to exercise regional influence in the vacuum left by the **Arab Spring** and to counter similar efforts by **Iran**, which Abu Dhabi regards as a threat.

Strategic partnership

- The vigor in India-UAE ties today owes its origins to Prime Minister Narendra Modi's visit to the UAE in 2015, the first by an Indian Prime Minister to the Emirates in 34 years.
- **Crown Prince Sheikh Mohammed Bin Zayed Al Nahyan**, is likely to conclude the **Comprehensive Strategic Partnership** between the two nations.
- The partnership is recognition of the unique role of India's immigrant population in the UAE's development story.
- The two sides will underscore their commitment to deal with terrorism.
- They also hope to work closely in Afghanistan, where five UAE diplomats were killed in a terror attack and where regional alignments are in flux.
- India is positioned to emerge as a credible security and economic partner of the UAE and the larger Gulf region at a time when the West is looking inwards and China's rise is getting hobbled by its aggressive rhetoric on territorial issues.

Trade and investment

- India and the UAE have a \$350 billion bilateral trade, which they plan to increase three times in the near future.
- After China and the U.S., the UAE is India's largest trading partner.

- The **Abu Dhabi Investment Authority**, one of the largest sovereign wealth funds, is seeking to identify investment opportunities in the Indian infrastructure sector.
- The \$75 billion UAE-India **Infrastructure Investment Fund**, to support investment in India's infrastructure sector over a decade

Terrorism

- Both sides denounced and opposed terrorism in all forms and manifestations
- Dismantle terrorism infrastructures and bring perpetrators of terrorism to justice.
- The target was clearly Pakistan, as they came down strongly on countries sponsoring terrorism against other states.
- Concerns over the rise of Islamic state

The Gulf Cooperation Council (GCC)

- New Delhi has tried to anchor its UAE policy in a broader regional framework as the economic dimension of **India's Gulf policy**
- GCC is India's second-largest trading partner.
- The largest single origin of imports into the country.
- The second largest destination for exports from India.
- The GCC countries supply 45 per cent of India's petroleum, with the UAE being the sixth largest source of imports of crude oil.
- The region remains a major destination for Indian investment.
- The Gulf states are interested in human resources from India in order to develop sectors as varied as information technology, construction, transportation and services.

Trade and Energy security

- India's trade and energy security is linked to the security of the **Straits of Hormuz and Bab-el-Mandeb**.
- The Indian Navy regularly visits Gulf ports, and trains with states in the region.
- Indian warships have also been deployed in the Gulf of Aden to carry out anti-piracy patrols.

Expatriate labour

- Indians are the largest expatriate community in the GCC states, numbering around 7 million.
- There are an estimated 2.6 million Indians in the UAE alone.
- Indian expatriate labour constitutes around 30 per cent of the total population of the UAE.
- India receives around 52 per cent of its remittances from its Gulf expatriates.
- There have been growing concerns about the living and working conditions in the host countries.

- India is pursuing manpower and labour agreements with Gulf states to help Indian workers in the region.
- It has also launched the **eMigrate** system for recruitment of Indian workers across the 17 Emigration Check Required countries.

History

- There has been continuous Indian presence in the UAE since at least the 18th century.
- Today, Indians make up 30% of the country's population — the single largest expatriate community in the UAE.

2. Trumps moves to pull out of TPP

- U.S. President Donald Trump had denounced it as a “job killer”.
- TPP trade pact was aimed to set trade rules for the 21st century and bind U.S. allies against growing Chinese economic clout.

Trans Pacific Partnership Agreement, Death knell for the pact?

- It is a Trade agreement between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and the United States.
- Promoted by Washington and signed by 12 countries in 2015, the TPP had yet to go into effect and U.S. withdrawal is likely to sound its death knell.
- Its signatories together represent 40% of the world economy.
- The attempt was to overturn trade deals — such as TPP and the **North American Free Trade Agreement** — that have drained U.S. jobs and destroyed its industrial heartlands.

3. Japan threatens to drag India to WTO on steel as Trump era heralds trade tensions

- Japan has requested WTO for dispute consultations with India over steel safeguard duties and a minimum import price for iron and steel products.
- India imposed duties of up to 20% on some hot-rolled flat steel products in 2015.
- Set a floor price in February 2016 for steel product imports to deter countries such as China, Japan and South Korea from undercutting local mills.

Reasons

- Japan is the **world's second-biggest steel producer**.
- Steel Industry of Japan sells nearly half of its products overseas.
- Japan is also worried about the more rough and tumble climate for global trade being engendered by incoming U.S. President Donald Trump.

ECONOMY

1. India rejects attempts by EU, Canada for global investment agreement

- India, along with **Brazil, Argentina** and some other nations, has rejected an informal attempt by the **European Union (EU)** and **Canada** to work towards a global investment agreement at the **World Trade Organisation (WTO)** level that would incorporate a contentious **Investor-State Dispute Settlement (ISDS)** mechanism.

Contentious mechanism

- The **ISDS** mechanism permits companies to drag governments to international arbitration without exhausting the local remedies.
- Claims huge amounts as compensation citing losses they suffered due to reasons, including policy changes.

- Japan also opposed the idea on the grounds of the costs involved in international arbitration.
- Such provisions could be a part of bilateral agreements but they can't be allowed in a multilateral agreement.

India's proposal

- At the recent trade ministers' meeting, India pushed for discussions on its proposal for a **Trade Facilitation in Services (TFS) Agreement** at the WTO level.
- The pact aims to facilitate easier movement of skilled workers and professionals across borders for short-term work.
- Meanwhile, the EU has indicated to India that it wants to first conclude talks on a new **Bilateral Investment Treaty (BIT)** with India and then restart negotiations on the proposed bilateral free trade agreement.
- A year ago, India had asked all nations, with which it has BITs, to re-negotiate those agreements on the basis of the new draft text of BIT.

2. Suryoday, utkarsh enter banking fray

Key Points

- Microlenders **Suryoday** and **Utkarsh**, which started **small finance banks (SFBs)**, are offering interest rates of more than 6% in a bid to compete with commercial lenders for savings bank deposits.
- While the new banks are offering higher rates on savings deposits, their lending rates would also be higher than those of commercial banks.

- The marginal cost of funds based lending rate (**MCLR**) for Suryoday would be 17.5%, while for Utkarsh it would be 14.5%.
- The MCLR for most commercial banks is about 8.5-9.5%.

- The marginal cost of funds based lending rate (MCLR) refers to the minimum interest rate of a bank below which it cannot lend, except in some cases allowed by the RBI. It is an internal benchmark or reference rate for the bank. MCLR actually describes the method by which the minimum interest rate for loans is determined by a bank - on the basis of marginal cost or the additional or incremental cost of arranging one more rupee to the prospective borrower.

About Suryoday :

- Suryoday is based in Navi Mumbai.
- The lender plans to convert all its 220 microfinance branches by March 2018.
- The net worth of the lender is 350 crore while **capital adequacy ratio** is 30%.

- Capital Adequacy Ratio (CAR), also known as Capital to Risk (Weighted) Assets Ratio (CRAR), is the ratio of a bank's capital to its risk. National regulators track a bank's CAR to ensure that it can absorb a reasonable amount of loss and complies with statutory Capital requirements.

About Utkarsh:

- It is Varanasi-based Utkarsh Small Finance Bank.

SCIENCE AND TECHNOLOGY

1. How ISRO plans to launch 103 satellites on a single rocket

- ISRO's workhorse **PSLV (C37)** with 103 satellites will be launched from the **Satish Dhawan Space Centre** in **Sriharikota** in Andhra Pradesh.
- With the exception of three satellites from India, the rest are from other countries.

How all the satellites will be placed in orbit

- The satellites will be separated from the launch vehicle in different directions.
- The separation angle and time of separation will be such that one satellite will not collide with another.
- The satellite separated from the launch vehicle will have a relative velocity of one metre per second.

- So after 1,000 seconds the distance between a satellite and the rocket will be 1,000 metres.
- The satellite that gets launched first will move at a relatively faster velocity than the next satellite that is launched.
- Due to different relative velocities, the distance between the satellites will increase continuously but the orbit will be the same.
- When the vehicle reaches the orbital condition, we will wait for the disturbances to die down before the preparation for separation begins.
- At an orbital altitude of around 500 km, it would take the vehicle 90 minutes to complete one orbit. So there will be sufficient time to launch all the 103 satellites.
- Even one degree difference in separation angle combined with relative velocity will ensure that no two satellites would collide.
- The satellites will be injected into orbit at different locations at different angles, at different times and different orientations.

History of such launch in India

- In June last year, ISRO launched 20 satellites in one go.
- It took about 26 minutes to launch all the 20 satellites.
- In 2008, ISRO launched 10 satellites in a single mission.

International launches

- The highest number of satellites launched in a single mission so far has been 37 by **Russia** in 2014.
- **NASA** launched 29 satellites in one go in 2013.

2. Ethiopian President all praise for makers of Jaipur foot

- Ethiopian President **Mulatu Teshome** praised the makers of the world famous Jaipur Foot for holding two camps in his country and rehabilitating about 700 handicapped persons.
- The on-the-spot fitment camps for limbless people were organized in the **Mekelle** and **Harar** towns of Ethiopia by **Bhagwan Mahaveer Vikalang Sahayata Samiti (BMVSS)** to restore mobility to handicapped persons by fitting artificial limbs manufactured by its technicians were.
- BMVSS founder and chief patron **D.R. Mehta** said the organization would be willing to set up a permanent centre in Ethiopia and train technical staff there.
- Similar centres have started functioning in **Afghanistan, Mauritius** and some other countries.

3. Will the superbug scare hit home?

- A U.S. woman's death took place in September last year allegedly due to superbug infection.

- She was found infected by the infection-causing bacterium **Klebsiella pneumoniae**, which was resistant to all antibiotics available in the U.S including the last-resort antibiotic **colistin**.

NDM-1

- The killer superbug's resistance was attributed to a gene that produces an enzyme now popularly called **New Delhi metallo-beta-lactamase-1 or NDM-1**.
- NDM-1 helps bacteria fend off carbapenems, a group of powerful antibiotics originally capable of killing several bacilli species.
- It is known to be transferred horizontally across bacterial species.

Resistance rampant in India

- Multidrug-resistant bacteria is fairly common in India.
- In 2016, **K. pneumoniae** caused varying degree of vision loss in a dozen elderly patients.
- Though the bacterium was found to be sensitive to **Imipenem**, a carbapenem antibiotic, the antibiotic could not help restore vision.
- An investigation found the bacteria in RL solution, which is used to wash the eyes during cataract procedure.

Lack of an action plan

- Irrational antibiotic use both among humans and animals is recognized as one of biggest drivers of antimicrobial resistance (AMR).
- WHO has said candidly in the past that India lacks a National Action Plan to combat AMR.
- A policy to combat antimicrobial resistance has been in place for more than five years.
- It envisages a separate schedule for antibiotics to prevent sale without prescription, hospital surveillance systems for monitoring resistance, enforcement of regulation in veterinary use of antibiotics and rational prescription of antimicrobials through evidence-based medicine.
- Sans an action plan, the policy remains unimplemented.
- The **National Centre for Disease Control** is now formulating a pilot plan.