GOVERNANCE

43 More Mobile Apps Banned

Recently, the government of India has blocked 43 new mobile apps, mostly Chinese, in the country, including shopping website AliExpress.

This is in addition to a total of 177 Chinese apps banned till now.

Key Points

- The Ministry of Electronics and Information Technology banned these mobile apps under Section 69A of the Information Technology Act (IT Act), 2000.
- Section 69A of the Information Technology Act, 2000, was introduced by an amendment to the Act in 2008.
- It gives the Central government the power to block public access to any information online whether on websites or mobile apps.
- Under Section 69A, if a website threatens India's defence, its sovereignty and integrity, friendly relations with foreign countries and public order, the government can ban it, after following due procedure.
- Detailed procedures to do so are listed under the Information Technology (Procedure and Safeguards for Blocking Access of Information by Public) Rules, 2009.
- Reasons behind banning apps:
- The action was taken based on the inputs regarding these apps for engaging in activities which are prejudicial to sovereignty and integrity of India, defence of India, security of state and public order.
- Government has received many complaints from various sources about misuse of some mobile apps available on Android and iOS platforms for stealing and transmitting users' data in an unauthorized manner to servers which have locations outside India.
- Indian Cyber Crime Coordination Center, Ministry of Home Affairs also gave a comprehensive report against the misuse of the apps.

Implications of the Ban:

- The decision to ban these apps, which comes amid continuing tensions between India and China, is the clear message from India that it will no longer be a victim of China's Nibble and Negotiate policy and will review the norms of engagement.
- The ban may affect one of China's most ambitious goals, namely to become the digital superpower of the 21st century.
- It will provide a good opportunity for Indian entrepreneurs to quickly rise to fill market gaps. This is also great for the Atmanirbhar Bharat mission.
- After the initial ban of apps, the government launched 'Digital India Atmanirbhar Bharat Innovate Challenge' to encourage Indian application developers and innovators and facilitate their ideas and products.

Way Forward

- World today recognises that the next source of economic growth lies in the digital economy and given its raw material being data, thereby whoever builds the electronic backbone will have enormous advantages over everyone else.
- India must speed up indigenisation, research and development and frame-up a regulatory architecture to claim data sovereignty.

BIODIVERSITY & ENVIRONMENT

Desalination Plants

Recently, Maharashtra announced the setting up of a desalination plant in Mumbai.

- The plant will process 200 million litres of water daily (MLD), and will help in overcoming the water shortage faced by Mumbai in the months of May and June.
- Maharashtra will be the fourth state to experiment with Desalination Plants.

Key Points

Desalination Plants:

- A desalination plant turns salt water into water that is fit to drink.
- Desalination is the process of removing salts from water to produce water that meets the quality (salinity) requirements of different human uses.
- Most commonly used technology for the process is reverse osmosis.

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- An external pressure is applied to push solvents from an area of high-solute concentration to an area of low-solute concentration through a semi-permeable membrane.
- The microscopic pores in the membranes allow water molecules through but leave salt and most other impurities behind, releasing clean water from the other side.
- These plants are mostly set up in areas that have access to sea water.

Advantage of Desalination Plants:

- It can extend water supplies beyond what is available from the hydrological cycle, providing an "unlimited", climate-independent and steady supply of high-quality water.
- It can provide drinking water in areas where no natural supply of potable water exists.
- As it generally meets or exceeds standards for water quality, water desalination plants can also reduce pressure on freshwater supplies that come from areas (over exploited water resources) that need protecting.

Disadvantage of Desalination Plants:

- Costly to build and operate desalination plants as the plants require huge amounts of energy.
- Energy costs account for one-third to one-half of the total cost of producing desalinated water.
- Because energy is such a large portion of the total cost, the cost is also greatly affected by changes in the price of energy.
- The environmental impact is another disadvantage to water desalination plants. Disposal of the salt removed from the water is a major issue.
- This discharge, known as brine, can change the salinity and lower the amount of oxygen (Hypoxia) in the water at the disposal site, stressing or killing animals not used to the higher levels of salt.
- In addition, the desalination process uses or produces numerous chemicals including chlorine, carbon dioxide, hydrochloric acid and anti-scalents that can be harmful in high concentrations.
- Opportunities: The environmental problem can be changed into an economic opportunity as:
- The discharge (brine) can also contain precious elements like uranium, strontium as well as sodium and magnesium which have the potential to be mined.
- Brine has been used for aquaculture, with increases in fish biomass of 300%. It has also been successfully used to cultivate the dietary supplement Spirulina, and to irrigate forage shrubs and crops.

Use of Desalination Plants in India:

- It has largely been limited to countries in the Middle East and has recently started being used in parts of the United States and Australia.
- In India, Tamil Nadu has been the pioneer in using this technology, setting up two desalination plants near Chennai in 2010 and then 2013.
- The other states that have proposed these plants are Gujarat and Andhra Pradesh.

Way Forward

- There is a need to make desalination technologies more affordable, i.e. increasing the viability of desalination for addressing Sustainable Development Goal 6 (SDG-6: Ensure Access to water and Sanitation for All).
- To do this, technological refinement for low environmental impacts and economic costs, along with innovative financial mechanisms to support the sustainability of desalination schemes, will likely be required.

INDIAN ECONOMY

Unified Single-window Clearance System

The government is working on a new, unified single-window clearance system for foreign direct investment (FDI) proposals.

- It is taking up several other active reform-related steps related to sovereign wealth funds and tax dispute settlements to continue the momentum of reforms. It also seeks feedback from global investors to make the system more functional.

Key Points

Background:

- Despite the presence of several IT platforms for investing in India such as the Foreign Investment Facilitation Portal (FIFP) and state single-window clearances, investors need to visit multiple platforms to gather information and obtain clearances from different stakeholders.

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- FIFP is the online single point interface of the Government of India with investors to facilitate FDI.
- It is administered by the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry.

About Single-window System:

- To address this, the creation of a centralised Investment Clearance Cell was proposed by the DPIIT.
- The cell will be a one-stop digital national portal that integrates the existing clearance systems of various ministries/departments of the government and will have a single, unified application form.
- It would provide end-to-end facilitation support, including pre-investment advisory, information related to land banks and facilitating clearances at Central and state level.
- It will allow digital access to regulators, policymakers and facilitators at one point irrespective of their geographical location and also provide time-bound approvals and a real-time status update to investors.
- It will enable the potential investor to interact with all the ministries whose approvals are required, in the central government as well as in the states.

Sovereign Wealth Funds:

- Despite the Covid-19 pandemic, the government has seen fresh interest from large sovereign wealth funds looking to invest in the country.
- In the Budget 2020-21, the government promised 100% tax exemption to the interest, dividend and capital gains income on the investment made in infrastructure and priority sectors before 31st March, 2024 with a minimum lock-in period of 3 years by the Sovereign Wealth Fund of foreign governments.
- A sovereign wealth fund is a state-owned investment fund composed of the money generated by the government, often derived from a country's surplus reserves.
- Despite lockdowns, the National Infrastructure Investment Fund (NIIF) actively engaged with the investors to find out the best way to facilitate them with the benefits of the tax exemptions.

Advance Pricing Agreements and Tax Dispute Settlements:

- Various MNCs highlighted the concerns about delays in bilateral Advance Pricing Agreements (APAs) and tax dispute settlements.
- APA is an agreement between a taxpayer and tax authority determining the transfer pricing methodology, for pricing the taxpayer's international transactions for future years.
- In February 2020, Government approved an amendment to the Direct Tax Vivad se Vishwas Bill 2020 which provides a mechanism for resolution of pending tax disputes in a simple and speedy manner.
- India needs a robust system to resolve disputes on an ongoing basis instead of waiting for specific schemes to be announced for them. There should be simultaneous tracking of disputes and efforts to settle them at the earliest.

Foreign Direct Investment

- It is an investment made by a firm or individual in one country into business interests located in another country.
- Generally, FDI takes place when an investor establishes foreign business operations or acquires foreign business assets, including establishing ownership or controlling interest in a foreign company.
- It is different from Foreign Portfolio Investment (FPI) where the foreign entity merely buys equity shares of a company.
- FPI does not provide the investor with control over the business.
- Routes Through which India gets FDI:
- Automatic Route: In this, the foreign entity does not require the prior approval of the government or the Reserve bank of India (RBI).
- Government Route: In this, the foreign entity has to take the approval of the government through the existing FIFP.

INTERNATIONAL AFFAIRS

New Chinese Village in Bhutan

Recently, Chinese media has claimed that a new border village built by China near Bhutan was on Chinese territory.

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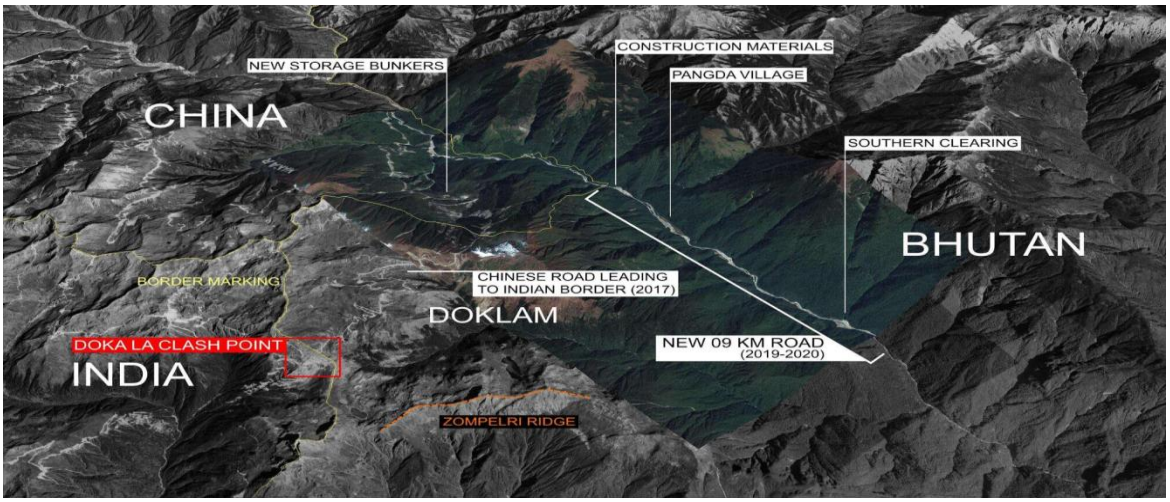
- However, the released images of the village show its location on territory disputed by the two countries.



Key Points

- The village of Pangda has been newly built and authorities in Yadong county (an administrative region) of Southwest China's Tibet Autonomous Region have confirmed that 27 households with 124 people voluntarily moved from Shangdui village to Pangda village in September 2020.
- It is for the first time since 2017 that a Chinese residential area has been noticed near the Doklam region, which is strategically important for India.
- Pangda is east of the India-Bhutan-China trijunction on the Doklam plateau, which was the site of a 72-day stand-off in 2017 triggered by China's road-building up to where it sees its border.
- Bhutan's Stand: It has officially denied the presence of any Chinese village in its territory.
- India's Stand: India sees it as an attempt by China to unilaterally push the trijunction further.
- China in the past too, has tried to reinforce its territorial claims in disputed areas with the neighbouring countries by building civilian settlements.
- For example, on disputed South China Sea islands and Bhutan's Trashigang district.
- China's Stand: According to China's maps, the village is within China's territory.
- It also blames India for the unsettled China-Bhutan border and stalled negotiations by creating the illusion that China is encroaching on Bhutanese territory.

Indo-Bhutan Relationship

Indo-Bhutan Treaty of Peace and Friendship, 1949:

- The treaty provides for, among other things, perpetual peace and friendship, free trade and commerce and equal justice to each other's citizens.

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- In 2007, the treaty was re-negotiated, and provisions were included to encourage Bhutan's sovereignty, abolishing the need to take India's guidance on foreign policy.

Multilateral Partnership:

- Both of them share multilateral forums such as South Asian Association for Regional Cooperation (SAARC), Bangladesh, Bhutan, India, and Nepal Initiative (BBIN), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), etc.

Hydropower Cooperation:

- Agreement on Cooperation in Hydropower 2006: Under a protocol to this agreement, India has agreed to assist Bhutan in the development of a minimum of 10,000 MW of hydropower and import of surplus electricity from the same by 2020.

Trade:

- The trade between the two countries is governed by the India Bhutan Trade and Transit Agreement 1972 which was last renewed in November 2016.
- The agreement establishes a free-trade regime between the two countries and also provides for duty-free transit of Bhutanese exports to third countries.

Economic Assistance:

- India is Bhutan's leading development partner. Since the launch of the First Five Year Plan (FYP) of Bhutan in 1961, India has been extending financial support to Bhutan's FYPs.
- India has allotted Rs. 4500 crore to Bhutan's 12th FYP (2018-23).

Educational and Cultural Cooperation:

- A large number of college-going Bhutanese students are studying in India. The Government of India provides a number of scholarships to Bhutanese students.

Environment:

- In June 2020, the Union Cabinet approved the signing of a Memorandum of Understanding (MoU) with Bhutan for cooperation in the field of environment protection and management of natural resources.

Support during Pandemic:

- India has maintained close coordination with Bhutan and has included it in plans for containment of the Covid-19 pandemic.
- It launched the second phase of the RuPay card in Bhutan to increase the domain of digital transactions in Bhutan.

IMPORTANT FACTS FOR PRELIM

Land-attack Version of BrahMos Missile

Recently, India has successfully test-fired a land-attack version of the BrahMos supersonic cruise missile from the Andaman and Nicobar Islands.

- The test by the Army comes over a month after the Naval version of BrahMos was successfully test fired from Indian Navy's indigenously-built stealth destroyer INS Chennai.

Key Points

Features of New Land-attack Version:

- The range of the missile has been extended to 400 km from the original 290 km but its speed has been maintained at 2.8 Mach or almost three times the speed of sound.
- The test was done in a "top-attack" configuration.
- Most modern missiles, including BrahMos, can be fired in both top-attack and direct attack modes.
- In top attack mode, the missile is required to climb sharply after launch, travel at a certain altitude and then fall on top of the target.
- In direct attack mode, the missile travels at a lower altitude, directly striking the target.

Significance of the Test:

- These tests are a display of India's tactical cruise missile triad, i.e. launch capability from land, sea and air platforms.
- India has already deployed a sizable number of the original BrahMos missiles and other key assets in several strategic locations along the Line of Actual Control (LAC) with China in Ladakh and Arunachal Pradesh.
- The test marks the achievement of a critical milestone in enhancing India's capability of engaging enemy's vitally important targets in depth areas.

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- In the last two-and-half months, India has test fired a number of missiles including an anti-radiation missile named Rudram-1 which is planned to be inducted into service by 2022.

BrahMos Missile:

- An amalgamation of the names of Brahmaputra river and Moskva river (Russia), BrahMos missiles are designed, developed and produced by BrahMos Aerospace.
- BrahMos Aerospace is a joint venture company set up by the Defence Research and Development Organisation (DRDO) and Mashinostroyenia of Russia.
- It is a medium-range supersonic cruise missile which can be launched from submarines, ships, aircraft or land.
- Cruise missiles are defined as "an unmanned self-propelled guided vehicle that sustains flight through aerodynamic lift for most of its flight path and whose primary mission is to place an ordnance or special payload on a target."
- Depending upon the speed, such missiles are classified as Subsonic (around 0.8 Mach), Supersonic (2-3 Mach) and Hypersonic cruise missiles (more than 5 Mach).
- It is the world's fastest supersonic cruise missile, as well as the fastest anti-ship cruise missile in operation.
- It operates on the "Fire and Forget" principle, i.e it does not require further guidance after launch.
- The missile has a flight range upto 290-km. However, India's entry into the Missile Technology Control Regime (MTCR) has extended the range of the BrahMos missile to reach 450-600 km.
- Various versions of BrahMos, including those that can be fired from land, warships, submarines and Sukhoi-30 fighter jets, have already been developed and successfully tested in the past.
- A hypersonic version of the missile, capable of reaching a speed of 5 Mach, is under development.

DAILY ANSWER WRITING PRACTICE

Qns Analyze the impact that the Covid-19 pandemic has had on the global oil sector. (250 words)

Ans:

Oil prices were already facing a downward trend, owing to a disagreement between Russia and Saudi Arabia (regarding oil production cut, leading to an oversupply of oil- Price war). Covid-19 has just acted as a catalyst in bringing down oil prices (because of too little demand).

Impact of Covid-19 on Oil Sector

- Reduced Demand: China, which is the world's manufacturing base and one of the leading consumer of oil, has been impacted by the lockdown imposed by the pandemic.
- Similarly, other major economies like the US, EU and India etc. are also witnessing economic shutdowns.
- This, in turn, has reduced the demand for oil and dragged the oil prices to a historic low.
- Impacting Industries: Further, the major demand for crude oil comes from transportation and industries like electricity, aviation, tourism etc. which are under shut down mode.
- Fear of Global Recession: IMF fears that the global recession triggered by Covid-19 will be one of the worst economic crisis since the Great depression of 1929.
- The subdued demand in the global economy will further keep the prices of oil at a low level.
- Political Instability in West Asia: This crash in oil prices may undermine the political stability of several oil-exporting countries in West Asia.
- Domino Effect: Given the high interdependence in the world economy, the oil crisis will create a domino effect in other non-oil-producing countries and further impact the growth prospects of the global economy.
- Shifting of Wealth: In the long run, the wealth would transfer from oil-exporting countries to oil-importing countries.
- The sharp fall in oil prices can turn out to be a blessing in disguise to large oil-importing countries like India and China.

Conclusion

- Oil is critical for the energy needs of the world economy. Thus, there is a need for a multilateral effort to finalize an agreement which could help bring the oil prices to a healthy range (which

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could be beneficial for the consumers and economically viable for the producers). In this context, G-20 can take the lead in coming up with an international intergovernmental framework for energy governance.

DAILY QUIZ

1. With reference to the Desalination process, consider the following statements:
   1. The salt removed from the water can change the salinity and lower the amount of oxygen in the water.
   2. The discharge from the desalination process can be used for aquaculture to increase fish biomass.

Which of the statements given above is/are correct?
   a) 1 only
   b) 2 only
   c) Both 1 and 2
   d) Neither 1 nor 2

2. With reference to BrahMos Missile, consider the following statements:
   1. The name of the missile is based on the amalgamation of the Brahma and Moskva names of Gods revered in two countries.
   2. It is a long-range supersonic cruise missile which can be launched from submarines, ships, aircraft or land.

Which of the statements given above is/are correct?
   a) 1 only
   b) 2 only
   c) Both 1 and 2
   d) Neither 1 nor 2

3. Which of the following statements is/are correct about the Indian Regional Navigation Satellite System (IRNSS):
   1. It is an independent regional navigation satellite system developed by the Indian Space Research Organization (ISRO).
   2. The IRNSS constellation NavIC has better position accuracy as compared to the GPS.
   3. The IRNSS is a recognised component of the World Wide Radio Navigation System (WWRNS).

Select the correct answer using the code given below:
   a) 1 and 2 only
   b) 2 only
   c) 2 and 3 only
   d) 1, 2 and 3

4. With reference to Chang'e-5 mission, consider the following statements:
   1. It seeks to collect lunar material and bring back to Earth.
   2. It is China's first mission to the Moon.

Which of the statements given above is/are correct?
   a) 1 only
   b) 2 only
   c) Both 1 and 2
   d) Neither 1 nor 2

5. Consider the following statements:
   1. National Nutrition Mission envisages to improve nutritional outcomes for children, pregnant women and lactating mothers.
   2. National Nutrition Strategy aims to attain malnutrition-free India by 2022.

Which of the above statements is/are correct?
   a) 1 only
   b) 2 only
   c) Both 1 and 2
   d) Neither 1 and 2

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