

INTERNATIONAL AFFAIRS- BILATERAL, GROUPINGS, ORGANISATIONS

India-Bangladesh JVC For LPG Business

India and Bangladesh signed an agreement for the formation of a 50:50 Joint Venture Company (JVC) for LPG business in Bangladesh.

About:

- The agreement was signed between the IOC Middle East FZE, Dubai, a wholly-owned subsidiary of Indian Oil Corporation (IOC) and RR Holdings Ltd., Ras Al Khaimah, UAE, the holding company of Beximco LPG of Bangladesh.
- The Joint Venture Company will help reduce the cost of import of LPG and make it more affordable for the consumers in Bangladesh.
- The company plans to diversify into LPG export to the north eastern states of India from Bangladesh which will prove to be a win-win situation for both the countries.

INDIAN ECONOMY

Special Liquidity Scheme For NBFCs And HFCs

The Reserve Bank of India (RBI) has operationalised the Rs 30,000 crore special liquidity scheme for NBFCs and HFCs. The cabinet had given its nod to the scheme on May 21, and now the RBI has notified it.

About:

- The scheme is aimed at improving the liquidity position of non-banking finance companies (NBFCs) and housing finance companies (HFCs).
- RBI will provide funds for the Scheme by subscribing to government guaranteed special securities issued by the Trust. The total amount of such securities issued outstanding shall not exceed Rs. 30,000 crores at any point of time.
- Government of India will provide an unconditional and irrevocable guarantee to the special securities issued by the Trust.
- The Scheme is being launched on July 1, 2020 through a Special Purpose Vehicle in the form of SLS Trust set up by SBI Capital Markets Limited (SBICAP).

As per RBI, following are the eligibility conditions for NBFCs/HFCs to avail of this scheme:

- All investment grade RBI-registered NBFCs, excluding Core Investment Companies (CICs), and NHB-registered HFCs are eligible.
- Capital adequacy should not be below the regulatory minimum as on March 31, 2019.
- Net non-performing assets should not be more than 6 percent as on March 31, 2019.
- They should have made profits in at least one of the last two financial years.
- They should not have been reported under SMA-1 or SMA-2 category by any bank for their borrowings during last one year prior to August 1, 2018.

Core Sector Shrinks by 23.4%

According to the data released by the Ministry of Commerce and Industry, the eight core sector industries contracted by 23.4% in May, 2020.

- In April 2020 the eight core sectors had contracted by 37%.
- In May 2019 the eight core sectors had grown by 3.8%.

Key Points

- Core Sector Data: Except fertiliser, all seven sectors — coal, crude oil, natural gas, refinery products, steel, cement, and electricity — had recorded negative growth in May.
 - The fertiliser production showed growth at 7.5% after two consecutive months of contraction.
 - The steel and cement showed a shrinkage of 48.4% and 22.2% respectively.
- Reason: The main reason for contraction was factories remained affected by a lack of labour and cash shortages owing to the nationwide lockdown.
- Impact: Experts are of the opinion that aftershocks of the lockdown will continue to affect domestic industry in coming months.
 - They will see a lower but certain contraction.

Core Sector Industries

- The eight core sector industries include coal, crude oil, natural gas, refinery products, fertiliser, steel, cement and electricity
- These comprise 40.27% of the weight of items included in the Index of Industrial Production (IIP).
- The eight Core Industries in decreasing order of their weightage: Refinery Products> Electricity> Steel> Coal> Crude Oil> Natural Gas> Cement> Fertilizers.
- Industry Weight (In percentage)

◦ Petroleum & Refinery production	28.04
◦ Electricity generation	19.85
◦ Steel production	17.92

○ Coal production	10.33
○ Crude Oil production	8.98
○ Natural Gas production	6.88
○ Cement production	5.37
○ Fertilizers production	2.63

Index of Industrial Production

- The Index of Industrial Production (IIP) is an indicator that measures the changes in the volume of production of industrial products during a given period.
- It is compiled and published monthly by the National Statistical Office (NSO), Ministry of Statistics and Programme Implementation.
- IIP is a composite indicator that measures the growth rate of industry groups classified under:
 - Broad sectors, namely, Mining, Manufacturing, and Electricity.
 - Use-based sectors, namely Basic Goods, Capital Goods, and Intermediate Goods.
- Base Year for IIP is 2011-2012.
- Significance of IIP:
 - It is used by government agencies including the Ministry of Finance, the Reserve Bank of India, etc, for policy-making purposes.
 - IIP remains extremely relevant for the calculation of the quarterly and advance GDP estimates.

ENVIRONMENT- CONSERVATION, BIO-DIVERSITY AND ISSUES

Striped Hairstreak; Elusive Prince

Lepidopterists have discovered two species of butterflies – the Striped Hairstreak and Elusive Prince – in Arunachal Pradesh.

About:

- The Striped Hairstreak (*Yamamotozephyrus kwangtungensis*) was located in Vijaynagar bordering Myanmar. It was first recorded by Japanese entomologists in Hainan province of China.
- The Elusive Prince (*Rohana tonkiniana*) was found in Miao on the periphery of the Namdapha National Park. It has a Vietnamese connection and was thought to be the more familiar Black Prince found in the Eastern Himalayas.
- India now has 1,327 species of butterflies, up from 1,318 in 2015.
- The recording of the two butterflies follows the “rediscovery” of the Assam Keelback, a non-venomous snake from the Gelling area of Arunachal Pradesh after 129 years.

Assam Keelback

Assam keelback has recently been rediscovered after 129 years in Arunachal Pradesh.

About:

- Scientific Name: *Herpetoreas pealii*.
- Common Name: Assam keelback; Peal's keelback.
- Family: It is a species of snake in the subfamily Natricinae of the family Colubridae.
- Distribution: The species is endemic to Northeast India. It has been recorded from Assam and Arunachal Pradesh.
- Physical description: The species is small — about 60 cm long, brownish, with a patterned belly.
- Background: It was discovered 129 years ago in 1891 by Samuel Edward Peal, a British tea planter based in Upper Assam.

SCIENCE AND TECHNOLOGY- EVERYDAY SCIENCE, SPACE, NUCLEAR, DEFENCE ETC

Advanced Virology Lab For Covid-19 Testing

The National Botanical Research Institute (NBRI), Lucknow, has established an Advanced Virology Lab for testing COVID-19.

About:

- The facility has been developed based on the guidelines of the Indian Council of Medical Research (ICMR), the World Health Organisation (WHO), and the Ministry of Health and Family Welfare.
- The Advanced Virology Lab is a Bio Safety Level- 3 facility.
- It has a “Negative Pressure”, which means it has a suction facility that can suck any aerosol and pass it through filters. It can filter virus or bacteria to make it a safe COVID-19 testing facility. It reduces the possibilities of infections at the culture facilities.

World's first ever online B.Sc. Degree in Programming and Data Science

Union HRD Minister launched World's first ever online B.Sc. degree in Programming and Data Science.

About:

- The programme has been prepared and offered by the Indian Institute of Technology Madras (IIT Madras), which is ranked No.1 in India Rankings 2020 by NIRF.

- The program will have videos from the faculty, weekly assignments and in-person invigilated exams just like any other regular course.
- This programme is open to anyone who has passed Class 12th, with English and Maths at the Class 10th level, and enrolled in any on-campus UG course. The current batch of students who are completing their Class 12th in 2020 are eligible to apply.
- Graduates and working professionals can also take up this programme.
- Data Science is one of the fastest growing sectors that is predicted to create 11.5 million jobs by 2026.

PRELIMS SPECIFIC FACTS- INDICES, DAYS, EVENTS, AWARDS ETC

National Doctor's Day 2020

Prime Minister Modi has saluted doctors on the occasion of Doctors' Day.

BC Roy:

- Bidhan Chandra Roy (1882 – 1962) was an eminent Indian physician, educationist, freedom fighter and politician.
- He studied medicine at the University of Calcutta and did his postgraduate study from St. Bartholomew's Hospital in London.
- In 1911, he accomplished the rare feat of becoming a member of the Royal College of Physicians and a fellow of the Royal College of Surgeons simultaneously.
- He served as the Chief Minister of West Bengal from 1948 until his death in 1962. He is often considered the Maker of Modern West Bengal due to his key role in the founding of several institutions and five eminent cities, Durgapur, Kalyani, Bidhannagar, Ashokenagar and Habra.
- He was awarded Bharat Ratna in 1961.

His view on Swaraj

- He was still pursuing medicine in Calcutta when the partition of Bengal was announced. Resisting the urge to join the movement, he controlled his emotions and concentrated on his studies, realising that he could serve his nation better by qualifying in his profession first.
- He believed that swaraj would remain a dream unless the people were healthy and strong in mind and body.

ODISHA DEVELOPMENT

Introduction of Locally Produced Millets in ICDS, PDS

Recently, Odisha has decided to introduce locally produced millets for the first time into Integrated Child Development Services (ICDS) Scheme and Public Distribution System (PDS). The initiatives will be carried out as a part of the Odisha's Millet Mission (2017).

- The State's millet mission aims to popularise local production of millets among farmers and increase local household consumption for better dietary diversity and nutritional gains.
- It is an attempt to develop decentralised infrastructure for processing and re-popularising millets.

Aim:

- The initiative intends to integrate locally grown millets as part of public food systems such as ICDS and PDS, mid-day meals.
- It also aims to build climate resilience among farmers and promote agroecological farming methods for cultivation that draw on chemical-free agriculture practices and locally sustained food systems.
- Ideally, the aim is to make the districts self-sufficient with produce, procurement and distribution.

Need:

- Odisha has an immense malnutrition burden to address, with about 45% children who are stunted.
- The State also has almost 41% women who have a below-normal body mass index, according to the National Family Health Survey, 2015-16.

Features:

- The districts will be using their District Mineral Foundation (DMF) funds to implement the initiative.
 - DMF is a trust set up as a non-profit body under the Ministry of Mines through the Mines and Minerals (Development & Regulation) Amendment Act, (MMDRA) 2015.
 - The objective is to work for the interest and benefit of persons and areas affected by mining related operations in those districts affected by the mining works.
- The money will be credited in the farmers' account at the end of the sowing and harvest season based on the report submitted by local implementation agencies and vetted by the district administration.
- Additionally, all the districts will provide 1.5 kilogrammes ragi per person (out of the five kg per person entitlement) through PDS.

Complementary to Agricultural Practices:

- The millet drive is largely focused on local food diversity and ensuring availability of food to farmers unlike the consumer and urban market-driven approach.
- Farmers who have adopted bio-inputs and follow the system of millets intensification will be given incentives for three years.

- The state government will also be incentivising agronomic practices including pest and weed management through organic methods. However, it does not exclude farmers who will be using chemical-based fertilisers.

Way Forward

- The focus on non-chemical approaches coupled with a focus on nutrition and food security so far distinguishes the Odisha approach from that of the Union government.
- Often, such interventions are driven towards creating attractive markets and ignore household nutrition and food security. The fact that this endeavour approaches millets from the point of nutrition and safe food is important.

DAILY ANSWER WRITING PRACTICE

Qns: Discuss the utility and importance of methanol production for the Indian Economy.

Energy is considered as the key inputs for economic development of the Country. India is poised to play a significant role in the Global energy space, as it is likely to account for 25% of the rise in global energy demand by 2040. Methanol can play an important role in order to contain the rising imports and improve the energy security of India.

Methanol is a low carbon, hydrogen carrier fuel produced from high ash coal, agricultural residue, CO₂ from thermal power plants and natural gas. Use of methanol in various ways is one of the viable options for meeting India's commitment to COP 21. Methanol production is also an important component in achieving aims of the National Policy on Biofuels, 2018.

Utility Of Methanol Production

- **Efficient Fuel:** Methanol is an efficient fuel and emits lesser Nitrogen Oxides and Particulate matter (PM) than gasoline and even produces no sulphur oxides as there is no sulphur in Methanol.
- **Blender and substitute:** It can be blended (or be completely substituted) with gasoline to use as a transport fuel along with other applications.
- **Less Emission:** The tailpipe emissions from methanol usage (i.e. at the consumption end) are quite low in comparison with conventional fuels like gasoline and diesel.

Importance of Methanol in Indian Economy

- **As a Transportation fuel:** Methanol can be blended with gasoline and diesel, or can be used as a substitute. It gives us an opportunity to reduce our dependence on imported crude oil.
 - This also offers an opportunity for the railway engines to run on methanol blends.
 - In order to check the pollution caused by diesel run ships, methanol powered ships would not only be cost effective alternatives but would also produce far less pollution.
- **Compliments Pradhan Mantri Ujjwala Yojana (PMUY):** It provides LPG connections to Below Poverty Line (BPL) households, who were earlier dependent on solid biomass as cooking fuel.
 - Since the price of crude is likely to increase in the long term. Therefore, methanol blending with LPG would help in ensuring clean fuel supplies for a longer duration.
- **Reduction in import bills:** Blending of 15% methanol in gasoline can result in at least 15% reduction in import of gasoline/ crude.
 - The methanol economy will result in a minimum 15% reduction in fuel bill annually for the country by 2030.
- **Replacement of diesel genset:** A large number of telecom towers, especially in rural areas run on diesel for as long as 18-20 hours a day because of frequent electric cuts.
 - Telecom towers in India consume around 2% of diesel consumption which is a significant amount indicating a vast potential for methanol to replace diesel.
- **Production of various chemicals:** Methanol can be used for producing various chemicals like formaldehyde, acetic acid and olefins which can be exported and can be a foreign exchange earner.
- **Reduction in GHG emissions:** Adoption of Methanol as priority fuel would bring down GHG emissions by 20% in terms of particulate matter, Nitrogen oxide, and Sulphur oxide thereby improving urban air quality.
- **Dovetailing with Swachh Bharat Mission:** Biomass and low quality coal can be sourced to generate methanol. Thus it can become a successful model of "waste to wealth" generation in India which can be dovetailed with Swachh Bharat Mission.

Way Forward

- Hence, by adopting Methanol, India can have its own indigenous and cheaper fuel. To achieve this, the Methanol Economy program initiated by NITI Aayog has been started.
- It aims at reducing our oil import bill; reducing greenhouse gas (GHG) emissions & converting Indian coal reserves and municipal solid waste into methanol leading to low import's while creating new jobs by setting up methanol production plants.