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INDIAN EXPRESS

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WORLD DAIRY SUMMIT

(Syllabus: GS Paper 3 - Economy & Agriculture)

Context: The inaugural session of the four-day International Dairy Federation World Dairy Summit (IDF WDS) 2022.

WORLD DAIRY SUMMIT

Efforts on to curb lumpy skin disease: PM Modi

Says women are the real leaders in India's dairy sector

HARIKISHAN SHARMA & MALAVIKA PRASAD
NEW DELHI, GREATER NOIDA (UP), SEPTEMBER 12



PM Narendra Modi with Uttar Pradesh CM Yogi Adityanath and Union Minister of Fisheries, Animal Husbandry & Dairying Parshottam Rupala in Greater Noida on Monday. *PTI*

OBSERVING THAT there has been a loss of livestock because of the lumpy skin disease (LSD) reported across several states in the country recently, Prime Minister Narendra Modi Monday said the Centre, with various state governments, is trying hard to control it.

Modi was speaking at the inaugural session of the four-day International Dairy Federation World Dairy Summit (IDF WDS) 2022, the theme of which is 'Dairy for Nutrition and Livelihood'. In the event, about 1,500 participants from 50 countries, including industry leaders, experts, farmers, and policy planners, will exchange ideas and discuss issues related to the sector. Chief Minister of Uttar Pradesh Yogi Adityanath welcomed PM Modi at the summit along with other dignitaries. The last such dairy summit was held in India about half a century ago in 1974.

Addressing the inaugural session, the PM said that the concept of '*pashu dhan*' and occupations associated with milk have been an important part of the 1,000-year-old Indian culture. He listed out unique characteristics of the Indian dairy sector, the first being the small farmers who contribute the most. The second is the vast network of dairy cooperatives which are spread across 2-lakh villages involving 2-crore farmers, he said. "There are no middlemen in this system; more than 70 per cent of the money received from the customers goes directly to the farmers," the PM said. He also pointed out the indigenous species of dairy animals which can adapt to extreme climates.

Highlighting the role of women in the dairy sector, as another unique feature of the Indian dairy sector, the Prime Minister said that women make for 70 per cent of the workforce in the sector. "The real leaders of India's dairy sector are women," he said, adding the sector provides livelihood to 8-crore families.

"In the recent past, there has been a loss of livestock due to lumpy skin disease across many states. Our scientists have developed an indigenous vaccine for lumpy skin disease," the PM said, adding efforts are also being made to control the disease by expediting testing and restricting the movement of animals.

The PM also said the total value of dairy production in the country is about Rs 8.5 lakh crore, which is more than the combined value of paddy and wheat production. The Indian dairy sector is known more for 'production by masses' than 'mass production', Modi said, adding the per capita availability of milk in India is higher than the world average.

Listing the measures taken by his government in the dairy sector, Modi said, "India produced 146 million tonnes of milk in 2014. It has now increased to 210 million tonnes. That is, an increase of about 44 per cent."

The Prime Minister also said that as compared to the 2 per cent production growth at the global level, India is clocking the milk production growth rate at more than 6 per cent. He said the government is building the "largest" database of dairy animals. "We have resolved that by 2025, we will vaccinate 100% of the animals against foot and mouth disease and brucellosis," he said.

Union Cabinet Minister of Fisheries, Animal Husbandry and Dairying Parshottam Rupala said the last time a dairy summit was organised in India was in 1974 and at that time milk production was 23 million tonnes, which has now increased to 220 million tonnes.

Uttar Pradesh CM Yogi Adityanath said the state was the largest producer of milk in the country and that over 4-lakh milk producers are working UP.

Union Minister of State for Fisheries, Animal Husbandry and Dairying Dr L Murugan; Minister of State Sanjeev Kumar Balyan; President of International Dairy Federation P Brazzale; and Director General of International Dairy Federation Ms Caroline Emond were also present.

World Dairy Summit

- World Dairy Summit 2022 is a congregation of the global and Indian dairy stakeholders which includes the industry leaders, experts, farmers, and policy planners.
- The theme of IDF World Dairy Summit 2022 is 'Dairy for Nutrition and Livelihood'.
- The theme highlights that the Indian Dairy industry is unique in the sense that it is based on a cooperative model that empowers the small and marginal farmers, particularly the women in the country.
- World Dairy Summit 2022 is being hosted by India. The country got the opportunity to host the event after a long gap of 48 years as the last time it hosted the World Dairy Summit was in the year 1974.
- World Dairy Summit 2022 is being organized in India at India Expo Centre & Mart, Greater Noida, Uttar Pradesh.

India's dairy sector

- India is ranked 1st in milk production contributing 23 % of global milk production.
- India is first among all countries in both production and consumption of milk.
- The top 5 milk-producing states are: Uttar Pradesh (14.9%, 31.4 MMT), Rajasthan (14.6%, 30.7 MMT), Madhya Pradesh (8.6%, 18.0 MMT), Gujarat (7.6%, 15.9 MMT) and Andhra Pradesh (7.0%, 14.7 MMT).
- India has the world's largest dairy herd with over 300 million bovines, producing over 187 million tonnes of milk.
- It contributes 5% to the national economy and employs 80 million dairy farmers directly.

Lumpy Skin Disease (LSD)

- According to a report by GAVI, the Global Alliance for Vaccines and Immunisation, the Lumpy Skin Disease (LSD) disease is caused by a virus called the Capripoxvirus and is "an emerging threat to livestock worldwide". It is genetically related to the goatpox and sheeppox virus family.
- LSD infects cattle and water buffalo mainly through vectors such as blood-feeding insects. Signs of infection include the appearance of circular, firm nodes on the animal's hide or skin that look similar to lumps.

INDIAN EXPRESS

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COAL-FIRED POWER GENERATION CAPACITY

(Syllabus: GS Paper2 - Economy)

'May need up to 28 GW of extra coal-based capacity by 2032'

India may need up to 28 GW of more coal-fired power generation capacity by 2032 apart from the 25 GW under-construction projects, the Central Electricity Authority said

Battery Energy Storage System (BESS) requirement in 2031-32 is varying from 51 giga watts (GW) to 84 GW, read the 'Draft National Electricity Plan (Vol-I Generation)', on which stakeholder feedback has been sought

Additional requirement of coal-based power in capacity mix would be 4 GW in 2026-27, in case of delay in achievement of hydro-based plants, which are in concurred/under construction stage

Projected all-India peak electricity demand and electrical energy requirement, as per preliminary estimates of demand projections:

FOR 2026-27
- 272 GW and 1,874 BU (billion units)

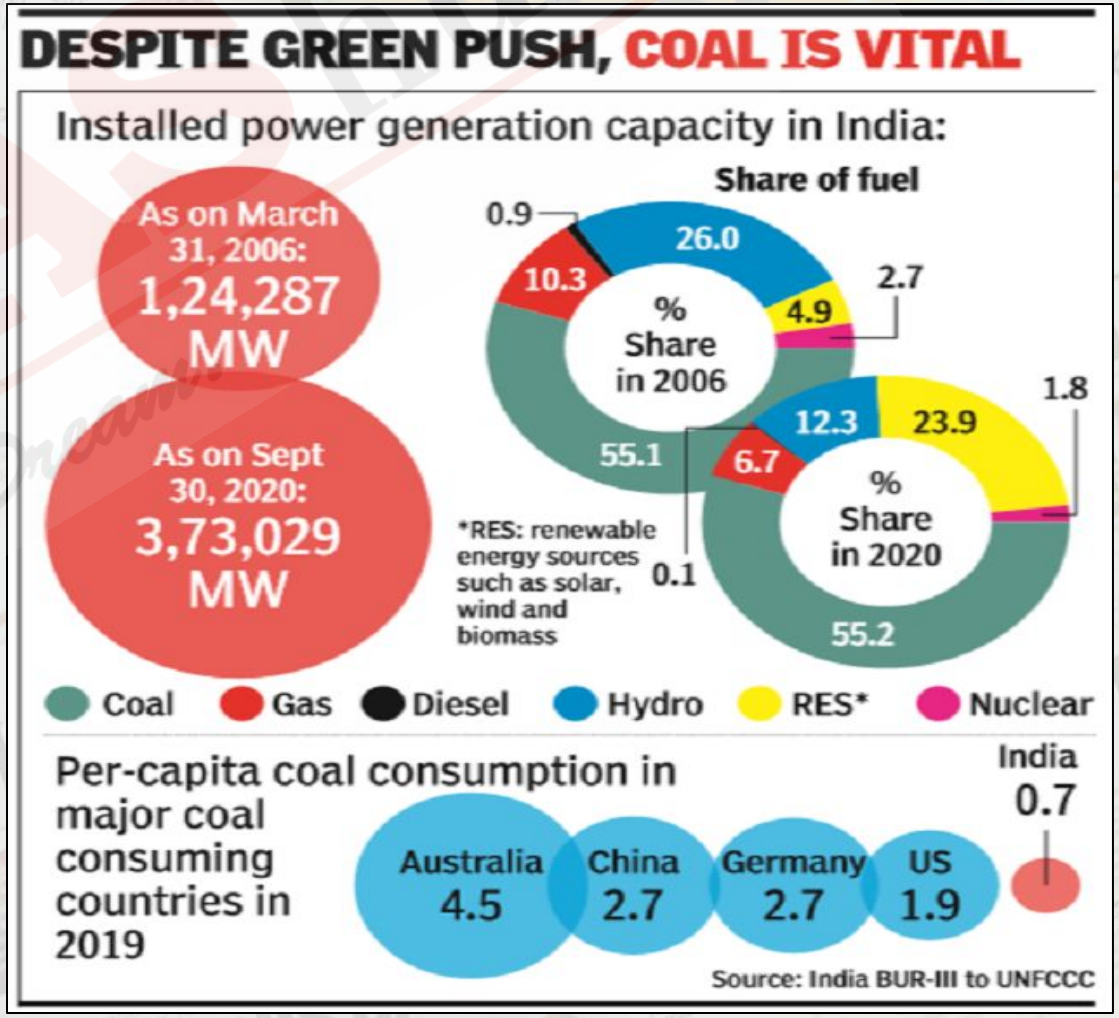
FOR 2031-32
- 363 GW and 2,538 BU

Source: Central Electricity Authority/PTI



When peak demand and energy requirement increases, both coal-based capacity and storage requirement — PSS (Pumped Storage Schemes) and BESS — increase along with marginal increase in hydro-based capacity

Context: India may need additional up to 28GW of coal-fired power generation capacity by 2032 apart from the 25GW thermal projects that are under construction.



Coal-fired power generation capacity in India

- In India, power is generated from conventional (Thermal, Nuclear & Hydro) and renewable sources (Wind, Solar, Biomass etc.).
- However, Major production of Electricity is achieved through coal a thermal power plant which is around 75% of the total power generation.
- Thermal power (power generated from burning coal, gas and petroleum) comprised 60% of India's installed capacity in power generation.
- Coal-based power generation, with a capacity of around 210 gigawatts (GW) of the total 396 GW, accounts for about 53% of India's total power capacity as on March 2022.
- India imports about 20% of its thermal coal requirements.

LIVEMINT

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INDEX OF INDUSTRIAL PRODUCTION (IIP)

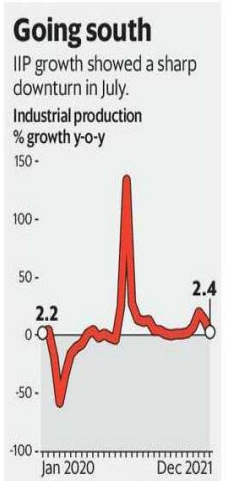
(Syllabus: GS Paper 3 - Economy)

IIP growth falls to 2.4% as demand slows

Dilasha Seth
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BENGALURU

Going south

IIP growth showed a sharp downturn in July.



Industrial activity decelerated sharply to a four-month low in July as a favourable base effect faded and consumer demand showed signs of slowing down, official data showed.

Manufacturing and electricity sectors reported a sharp moderation in growth, while mining contracted, prompting economists to pin hopes on festival season demand for industrial recovery. But the tightening of monetary policy may impact investment in the manufacturing sector, they said.

Index of industrial production (IIP) growth fell to 2.4% in July from 12.7% in June, data released by the National Statistical Office showed on Monday.

While the overall IIP for July is 2.1% higher than the pre-covid level of July 2019, consumer durables sector comprising white goods was lower 6.8% and consumer non-durables comprising inelastic demand was 2.5% lower compared to the pre-covid level.

"The IIP growth plunged in July... trailing our expectation of 4%...an unfortunate but expected fallout of the base normalization, heavy rainfall in some areas, and the shift in discretionary consumption to contact-intensive services," said Aditi Nayar, chief economist, ICRA.

Manufacturing, which accounts for 77% of the index, reported a 3.2% growth in July compared to 12.9% growth in the previous month.

"The major drag has been consumer goods with FMCG showing negative growth. The higher growth in capital goods is due to low base plus revival in part of the auto sector and not reflective of investment picking up," said Madan Sabnavis, chief economist, Bank of Baroda.

The key to the future will be recovery in consumer goods in August-October given that the festival season has started early which should reflect higher demand, he added.

The capital goods sector grew by 5.8% in July compared to 26.1% in June.

Consumer durables, representing elastic demand saw growth decline to 2.4% in July compared to 23.8% growth in the previous month.

Consumer non-durables, on the other hand declined by 2% in July compared to a 2.9% growth in June.

"The consumer non-durables segment continues to be an area of worry... Rebound of the consumer non-durable segment is critical for a sustained and broad based industrial recovery. Going forward, the recovery in this segment looks challenging due to the squeezing of the purchasing power of the households as wage growth is lagging behind inflation," said Sunil Kumar Sinha, principal economist, India Ratings and Research.

The key to the future will be recovery in consumer goods in Aug-Oct period of the festival season

Nine of the 22 manufacturing sub-sectors reported a contraction in output, including food products, tobacco products, leather products and electrical equipment.

Electrical equipment output declined sharply by 15.6% in July.

While the IIP in the first quarter of the current fiscal grew by 12.7%, the national accounts data for the June quarter released last month showed the economy grew below expectations at 13.5% due to dismal performance of the manufacturing sector.

In fact, global ratings agency Moody's Investors Service last week sharply lowered India's economic growth forecast for 2022 to 7.7% from 8.8% estimated earlier on the back of monetary policy tightening, uneven distribution of monsoon and slowing global growth.

Nayar of ICRA said that high frequency indicators for August point at a mixed trend. "On balance, we expect the IIP to report 4-6% YoY growth in August," she said.

Context: Industrial activity decelerated sharply to a four-month low in July as a favourable base effect faded and consumer demand showed signs of slowing down.

Index of Industrial Production (IIP)

- The Index of Industrial Production (IIP) is an index which shows the growth rates in different industry groups of the economy in a stipulated period of time.
- 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.

IIP vs ASI

- While the IIP is a monthly indicator, the Annual Survey of Industries (ASI) is the prime source of long-term industrial statistics.
- The ASI is used to track the health of the industrial activity in the economy over a longer period. The index is compiled out of a much larger sample of industries compared to IIP.

8 core industries

- India's core industries comprise Coal, Crude Oil, Natural Gas, Refinery Products, Fertilizers, Steel, Cement, and Electricity.
- Together, the index accounts for 40.27% weight of items included in the Index of Industrial Production (IIP).
- The eight core sector industries in decreasing order of their weightage: Refinery Products> Electricity> Steel> Coal> Crude Oil> Natural Gas> Cement> Fertilizers.

LIVEMINT Page 8

IRAN NUCLEAR DEAL

(Syllabus: GS Paper 2 - International relations)

Iran nuclear talks in disarray as monitors meet to discuss probe

Bloomberg
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International atomic monitors convened on Monday to discuss a standoff with Iran that's dragged efforts to revive a landmark agreement to curtail the country's nuclear program deeper into disarray.

The International Atomic Energy Agency's probe into Iran's past nuclear activities has taken centre stage in talks to resuscitate the 2015 deal, where success could unleash a surge in Iranian oil exports. Diplomats will discuss the issue this week in the Austrian capital, where the agency's 35-member board of governors is meeting.

"The information gap is bigger and bigger," IAEA Director General Rafael Mariano Grossi said at a press briefing in Vienna, adding he still expects Iran to cooperate in his inquiry.

Iran is demanding the IAEA investigation into suggestions of nuclear activities at undeclared sites be terminated before it starts to dismantle a program now enriching uranium just below the levels needed for weapons. The US and other world powers have offered sanctions relief if the Islamic Republic curtails nuclear-fuel production, but they insist it's up to the IAEA to declare an end to the investigation.

The governments of France, Germany and the UK issued a joint statement on Saturday addressing the latest demands from the Islamic Republic.

"In light of Iran's failure to conclude the agreement on the table, we will consult with our international partners on how best to deal with Iran's continued nuclear escalation," the European governments said.

As European hopes dim for an immediate return to the agreement, Iran's leadership is focusing on the region. President Ebrahim Raisi is expected to meet his Chinese and Russian counterparts at a meeting of the Shanghai Cooperation Organization that convenes on Thursday in Uzbekistan.

Even if Iran and world power manage to clear the final hurdles toward reviving the accord, the IAEA's Grossi warned the amount of time his inspectors will need to verify compliance has grown.

"The reality is that it is going to be extremely difficult and we will have to work very hard and Iran will have to be very transparent," he said. "There's a lot of homework to do."

Talks to rein in Tehran's nuclear activities in exchange for easing sanctions, including those on oil exports, have been on a knife's edge since European negotiators proposed a final 25-page draft agreement after almost 18 months of negotiations.

After optimistic early signals that a return to the JCPOA could be days away, sides are now resigned to more delays, dragging out talks and preventing Iran from ramping up its sales of crude.

The nuclear deal unraveled after then-President Donald Trump withdrew the US in 2018 and reimposed sanctions. In response, Iranian officials expanded the country's nuclear program.

Tehran denies it's seeking to build atomic warheads but concerns it might develop the technology to do so propelled years of diplomacy that led to the deal with world powers.



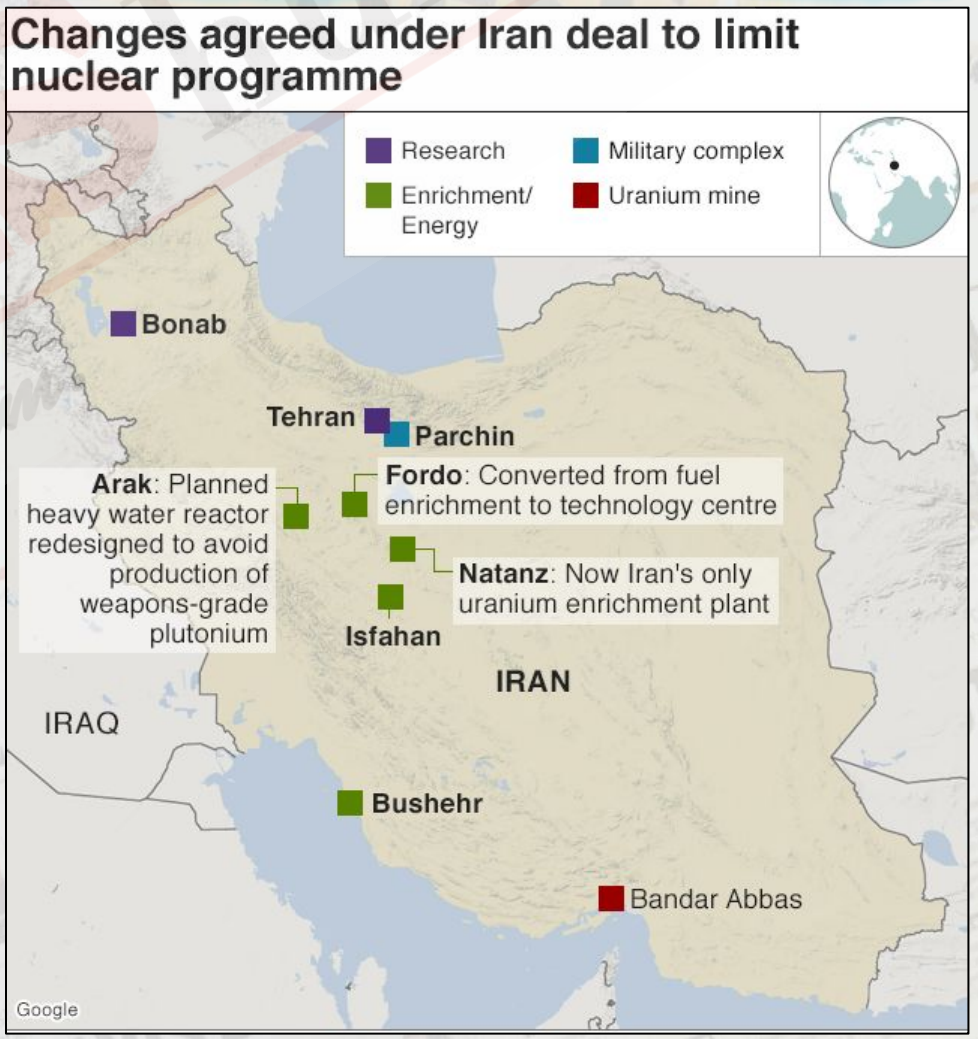
The International Atomic Energy Agency's probe into Iran's past nuclear activities has taken centre stage in talks to resuscitate the 2015 deal. REUTERS

As European hopes dim for an immediate return to the agreement, Iran's leadership is focusing on the region

Context: The International Atomic Energy Agency's probe into Iran's past nuclear activities has taken centre stage in talks to resuscitate the 2015 deal.

Iran nuclear deal

- The Iran nuclear agreement, formally known as the Joint Comprehensive Plan of Action (JCPOA), is a landmark accord reached between Iran and several world powers, including the United States, in July 2015.
- Under its terms, Iran agreed to dismantle much of its nuclear program and open its facilities to more extensive international inspections in exchange for billions of dollars' worth of sanctions relief.
- The JCPOA, which went into effect in January 2016, imposes restrictions on Iran's civilian nuclear enrichment program.
- At the heart of negotiations with Iran were the five permanent members of the UN Security Council (China, France, Russia, the United Kingdom, and the United States) and Germany - collectively known as the P5+1. The European Union also took part.
- The P5+1 wanted to unwind Iran's nuclear program to the point that if Tehran decided to pursue a nuclear weapon, it would take at least one year, giving world powers time to respond.
- The United States announced its withdrawal from the Joint Comprehensive Plan of Action (JCPOA), also known as the "Iran nuclear deal" or the "Iran deal", on May 8, 2018.
- After US abandoned the deal and reinstated banking and oil sanctions, Iran ramped up its nuclear programme in earnest, returning to approximately 97% of its pre-2015 nuclear capabilities.



THE HINDU Page 14

ADOPTION RULES IN INDIA

(Syllabus: GS Paper 2 - Polity & Governance)

States told to implement adoption rules

The instructions come despite concerns over jurisdiction of District Magistrates

JAGRITI CHANDRA
NEW DELHI

The Ministry of Women and Child Development has written to State governments, asking them to immediately implement the revised adoption rules requiring adoption orders to be passed by District Magistrates (DMs) instead of courts with effect from September 1.

The instructions come despite concerns raised over jurisdiction of DMs in civil matters such as inheritance and succession, as well as delays likely to be caused in cases where the court has already passed orders since September 1 or is likely to pass them shortly after having spent several months on the proceedings.

"All the cases pertaining to adoption matters pending before the Courts shall be transferred to the District Magistrates from the date of commencement of the Rules i.e. 01.09.2022," Indevar Pandey, Secretary, Ministry of Women and Child Development, wrote to Chief Secretaries of States and Union Territories on Monday.



Parliament passed the Juvenile Justice (Care and Protection of Children) Amendment Bill last year. ▪ AFP

He urged for "immediate compliance of the same, so that there is no delay in passing the adoption orders."

"The Centre should have clarified what happens to the orders that have been passed between September 1 and September 12, and how should CARA and DMs deal with such cases. Courts were not informed about the amendments and the Centre has also not yet notified Adoption Regulations, 2022 detailing the process to be followed by the DMs," said Sindhu Naik, Member, Karnataka State Council For Child Welfare.

The amendment being contested is an amendment to the rules, and not the principal Act and therefore revising it shouldn't be a difficult task involving Parliament's nod, she pointed out.

"It transfers cases that are currently being heard in the district and civil courts to the DM, which should be challenged. The rules should not apply retrospectively, and should state that only new cases after September 1 should be brought to DMs for seeking adoption orders," she added.

Experts have drawn attention to the concern that when a child turns 18 and his or her inheritance rights are contested before a court, a judicial order is more tenable to secure entitlements.

Parliament passed the Juvenile Justice (Care and Protection of Children) Amendment Bill, 2021 last year in order to amend the Juvenile Justice Act (JJ Act), 2015. These authorise District Magistrates and Additional District Magistrates to issue adoption orders under Section 61 of the JJ Act by striking out the word "court".

This was done in order to ensure speedy disposal of cases and enhance accountability. The amendments to the Juvenile Justice (Care and Protection of Children) Model Rules, 2016, were notified on September 1 and require all adoption cases to be transferred to the DM with immediate effect.

Context: The Ministry of Women and Child Development has written to State governments, asking them to immediately implement the revised adoption rules requiring adoption orders to be passed by District Magistrates (DMs) instead of courts with effect from September 1.

Adoption rules in India

- In India, two legislations deal with the adoption of a child:
  - The Hindu Adoption and Maintenance Act, 1956 (HAMA)
  - The Juvenile Justice (Care and Protection of Children) Act, 2015.
    - This includes Juvenile Justice (Care and Protection of Children) Model Rules, 2016 and Adoption Regulations, 2017.
- The fundamental principles that govern adoption state that the interests of the child are most important and preference is to be given to place the child in adoption with Indian citizens with "due regard to the principle of placement of the child in his socio-cultural environment, as far as possible".

Central Adoption Resource Authority (CARA)

- The Central Adoption Resource Authority (CARA), a statutory body of the Ministry of Women and Child Development (MoWCD), deals with the adoption of orphaned, abandoned, and surrendered children through its associated or recognised adoption agencies. It was set up in 1990.
- As per its official website, CARA functions as the nodal body for the adoption of Indian children and is mandated to monitor and regulate in-country adoptions.
- The nodal body is also designated as the central authority to deal with inter-country adoptions as per the provisions of the Hague Convention on inter-country Adoption, 1993.
- The convention seeks to protect children and their families against the risks of illegal or immature operations abroad. India became a signatory to this convention in 2003.

THE HINDU Page 16

FOREIGN EXCHANGE RESERVES

(Syllabus: GS Paper 3 - Economy)

'Drop in forex reserves concerning as inflows lag'

'Central banks' hawkish moves bode ill'

REUTERS
MUMBAI



India's foreign exchange reserves dropping to a two-year low is concerning as the pace of foreign inflows into the country's markets eases amid global monetary policy tightening, an economists said on Monday.

India's foreign exchange reserves declined to $553.1 billion in the week ended September 2, their lowest since October 2020 and down by $8 billion from the previous week, Reserve Bank of India data showed.

It was the biggest drawdown in reserves since early July, which analysts attributed to the RBI intervening in currency markets to help the rupee after it hit a record low of 80.12 against a surging dollar that week.

"Situation is getting worrisome because the Federal Reserve and other central banks continue to act aggressively and inflows into Indian markets in September are not as robust as August's," said Anitha Rangan, economist with Equirus, adding imports are rising. Foreign investors have bought $700 million in equities so far this month, after pouring in $6.5 billion in August.

Context: India's foreign exchange reserves dropping to a two-year low is concerning as the pace of foreign inflows into the country's markets eases amid global monetary policy tightening.

Foreign Exchange reserves

- Foreign Exchange reserves or Forex reserves are assets such as foreign currencies, gold reserves, treasury bills, etc retained by a central bank or other monetary authority that checks the balance payments and influences the foreign exchange rate of its currency and maintains stability in financial markets.
- RBI is the custodian of the Foreign exchange reserves in India.
- India's Forex Reserve include:
    - Foreign Currency Assets
    - Gold reserves
    - Special Drawing Rights
    - Reserve position with the International Monetary Fund (IMF).

Foreign Currency Assets

- FCA are assets that are valued based on a currency other than the country's own currency.
- FCA is the largest component of the forex reserve. It is expressed in dollar terms.
- FCA includes the effect of appreciation or depreciation of non-US units like the euro, pound and yen held in the foreign exchange reserves.
    - Currency appreciation refers to the increase in value of one currency relative to another in the forex markets.
    - Currency depreciation is a fall in the value of a currency in a floating exchange rate system.
- In a floating exchange rate system, market forces (based on demand and supply of a currency) determine the value of a currency.

TIMES OF INDIA

Page 1

TAMIL MINORITY ISSUES

(Syllabus: GS Paper 2 - International relations)

India calls out Lanka at UNHRC on Tamil issue

Move Follows SL Allowing Docking Of China Spy Ship

Sachin.Parashar
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New Delhi: India called Sri Lanka out at the United Nations Human Rights Council (UNHRC) on Monday for lack of "measurable progress" on the latter's commitments for a political solution to the ethnic Tamil minority issue through "full implementation of the 13th Amendment of the Constitution". The government urged Sri Lanka to take immediate and credible action to fulfil its commitments.

Significantly, this rare public disapproval of Sri Lanka's actions, or inaction as the case might be, follows the island nation's decision to allow a Chinese "spy vessel" to dock at the Hambantota port despite objections raised by India.

▶ In dig at China..., P 16

$3.8 BN AID TO LANKA

- India notes with concern **lack of 'measurable progress' by SL on its commitment of a political solution to the ethnic issue** through full implementation of the 13th Amendment of Constitution
- India's two **'fundamental' considerations** remain support to Lankan Tamils for justice, dignity & peace; second, unity, stability & territorial integrity of SL
- India this year alone has given **aid worth $3.8 bn to SL** to help it deal with eco crisis

Context: India called Sri Lanka out at the United Nations Human Rights Council (UNHRC) for lack of "measurable progress" on the latter's commitments for a political solution to the ethnic Tamil minority issue through "full implementation of the 13th Amendment of the Constitution".

Tamil minority issues

- Although the military conflict in Sri Lanka came to an end in 2009, the conflict has remained on the Human Rights Council's agenda ever since due to the pervasive impunity for the tens of thousands of Tamil civilian deaths in what the UN called a "bloodbath."
- The nationalist Sinhalese administration in Sri Lanka was responsible for the oppression of the Tamil minority.
- The division also fueled extremism in the country, led by the Liberation Tigers of Tamil Eelam, which plunged the country into years of civil conflict.
- **Issues of Tamilians in Sri Lanka**
  - Denial of Citizenship
  - Linguistic Discrimination
  - Religious Discrimination
  - Intensified Movements
  - Liberation Tigers of Tamil Eelam (LTTE)

DOWN TO EARTH

Sept 13

X-RAY RADIOGRAPHY

(Syllabus: GS Paper 3 - Sci & Tech)

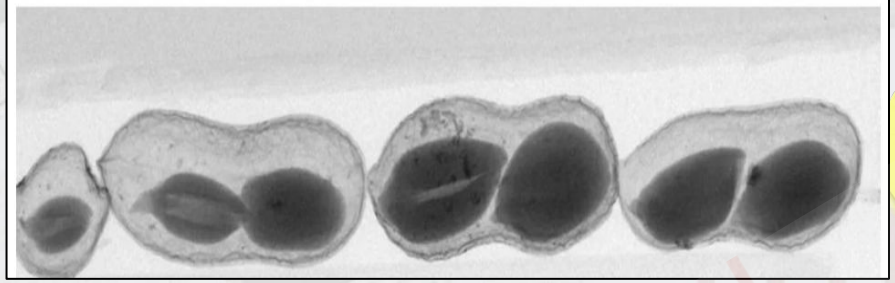
SCIENCE & TECHNOLOGY

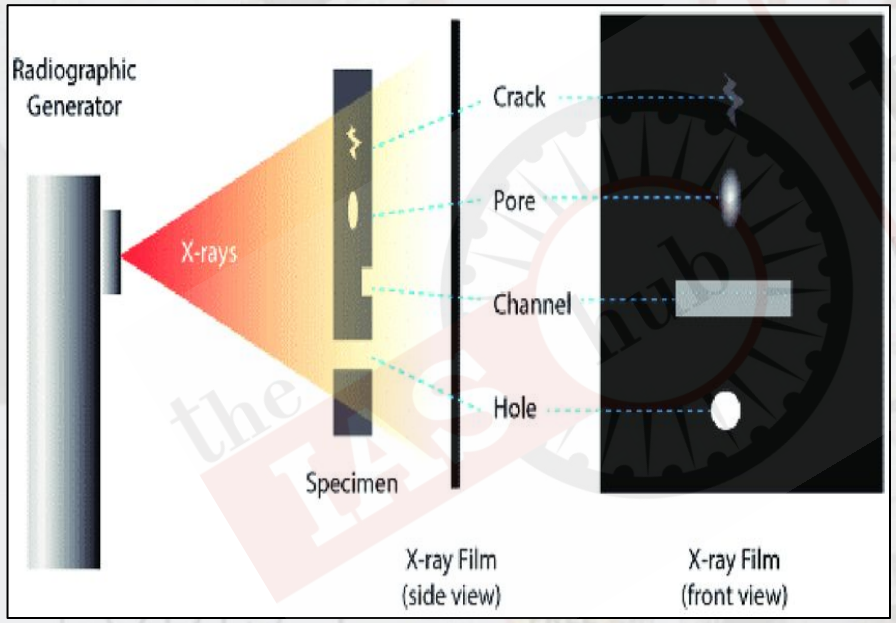
Good news for farmers: ICRISAT uses X-ray to assess peanuts' quality

X-ray radiography has the potential to be the right technology for in-field evaluation of farmers' produce, the study by ICRISAT has showed

By DTE Staff

Published: Monday 12 September 2022





Context: A team of researchers have, for the first time, used X-ray radiography to determine key market-related traits of peanuts while still inside the hull.

Key points

- The study had shown that X-ray radiography had the potential to be the right technology for in-field evaluation of farmers' produce which the International Committee for Food Value and Safety calls for.
- A portable X-ray imaging system will be especially useful in grain value chains where the time needed to assess the economic value of grain by threshing or milling is a significant barrier.

X-ray radiography

- X-ray or radiography uses a very small dose of ionizing radiation to produce pictures of the body's internal structures. X-rays are the oldest and most frequently used form of medical imaging.
- They are often used to help diagnosed fractured bones, look for injury or infection and to locate foreign objects in soft tissue.
- Some x-ray exams may use an iodine-based contrast material or barium to help improve the visibility of specific organs, blood vessels, tissues or bone.
- X-Rays or X-radiation is a form of electromagnetic radiation.
- They are powerful waves of electromagnetic energy.
- Most of them have a wavelength ranging from 0.01 to 10 nanometres, corresponding to frequencies in the range 30 petahertz to 30 exahertz and energies in the range 100 eV to 100 keV.
- The X-Rays properties are given below:
    - They have a shorter wavelength of the electromagnetic spectrum.
    - Requires high voltage to produce X-Rays.
    - They are used to capture the human skeleton defects.
    - They travel in a straight line and do not carry an electric charge with them.
    - They are capable of travelling in a vacuum.

PIB

Sept 13

MILLETS: SUPERFOOD

(Syllabus: GS Paper 3 - Agriculture & Economy)

The Department of Food and Public Distribution directs to use Millet products during official meetings and Canteens

The initiative is to promote millets consumption for its health benefit

Context: In order to promote consumption of Millets and in view of their health benefits, all offices of the Department of Food and Public Distribution (DFPD) have recently directed to introduce and promote millets in their canteens and in meetings.

- The year 2023 will be celebrated as International Year of Millets (IYoM).

Millets: Superfood

- Millets are rich sources of minerals like calcium, iron, zinc, phosphorus, magnesium, and potassium.
- It also contains appreciable amounts of dietary fibre and vitamins such as folic acid, vitamin B6, β- Carotene, and niacin.
- The availability of high amounts of lecithin is useful for strengthening the nervous system.
- Therefore, regular consumption of millets can help to overcome malnutrition.
- Millets are rich in phytochemicals like tannins, phytosterols, polyphenols and antioxidants; they do contain some anti-nutritional factors which can be reduced by certain processing treatments.
- Millets have a wide capacity for adaptation because they can grow from coastal regions of Andhra Pradesh to moderately high altitudes of North-eastern states and hilly regions of Uttarakhand.
- Millets can withstand variations in moisture, temperature and the type of soils ranging from heavy to sandy infertile lands.

Millets Production in India:

- The three major millet crops currently grown in India are jowar (sorghum), bajra (pearl millet) and ragi (finger millet).
- Along with that, India grows a rich array of bio-genetically diverse and indigenous varieties of “small millets” like kodo, kutki, chenna and sanwa.
- Major producers include Rajasthan, Andhra Pradesh, Telangana, Karnataka, Tamil Nadu, Maharashtra, Gujarat and Haryana.

PIB

Sept 13

EARLY INTERVENTION CENTRE- PRAYAS

(Syllabus: GS Paper 2 - Health & Social Justice)

EARLY INTERVENTION CENTRE "PRAYAS" INAUGURATED AT ARMY HOSPITAL (R&R)

Posted On: 12 SEP 2022 4:25PM by PIB Delhi

Context: To alleviate the suffering and instil confidence in parents in dealing with differently abled children a model “Early Intervention Centre- Prayas" has been established at Army Hospital (Research & Referral).

About Early Intervention Centre- Prayas

- The “Early Intervention Centre” is a comprehensive state-of-the-art facility which is dedicated to the children with special needs. Children of Armed Forces personnel upto six years of age suffering from autism, cerebral palsy, sleep and language delay and other disabilities will benefit immensely from this venture.
- The newly established Centre has facilities of advanced screening for hearing and visual defects, detection of Autism, clinical identification of various syndromes and therapeutic facilities like Special Education, Sensory Integration Occupational and Physiotherapy, Behaviour Modification and Nutritional Guidance.
- It is integrated with Vatsalya, a paediatric super speciality discipline, which has been redesigned with a child friendly Walt Disney theme. A multi-disciplinary approach combining expertise of various therapists will work together to enhance the capabilities of the special children.
- Army Hospital (R&R) provides tertiary care referral facilities and is the Centre of Excellence in various subspecialties.
- Addition of EIC "Prayas" will help in early diagnosis and institution of necessary therapeutic interventions to differently abled children during the best window of opportunity, which is between birth and 6 years of age.
- This Centre will achieve a quantum leap in therapeutic outcome of children with developmental delay and thereby aims to achieve immense improvement in caregiver satisfaction.

THANK YOU!

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