



## News Analysis (19 Sep, 2020)

---

 [drishtias.com/current-affairs-news-analysis-editorials/news-analysis/19-09-2020/print](https://drishtias.com/current-affairs-news-analysis-editorials/news-analysis/19-09-2020/print)

### 60 Years of Indus Water Treaty

---

#### Why in News

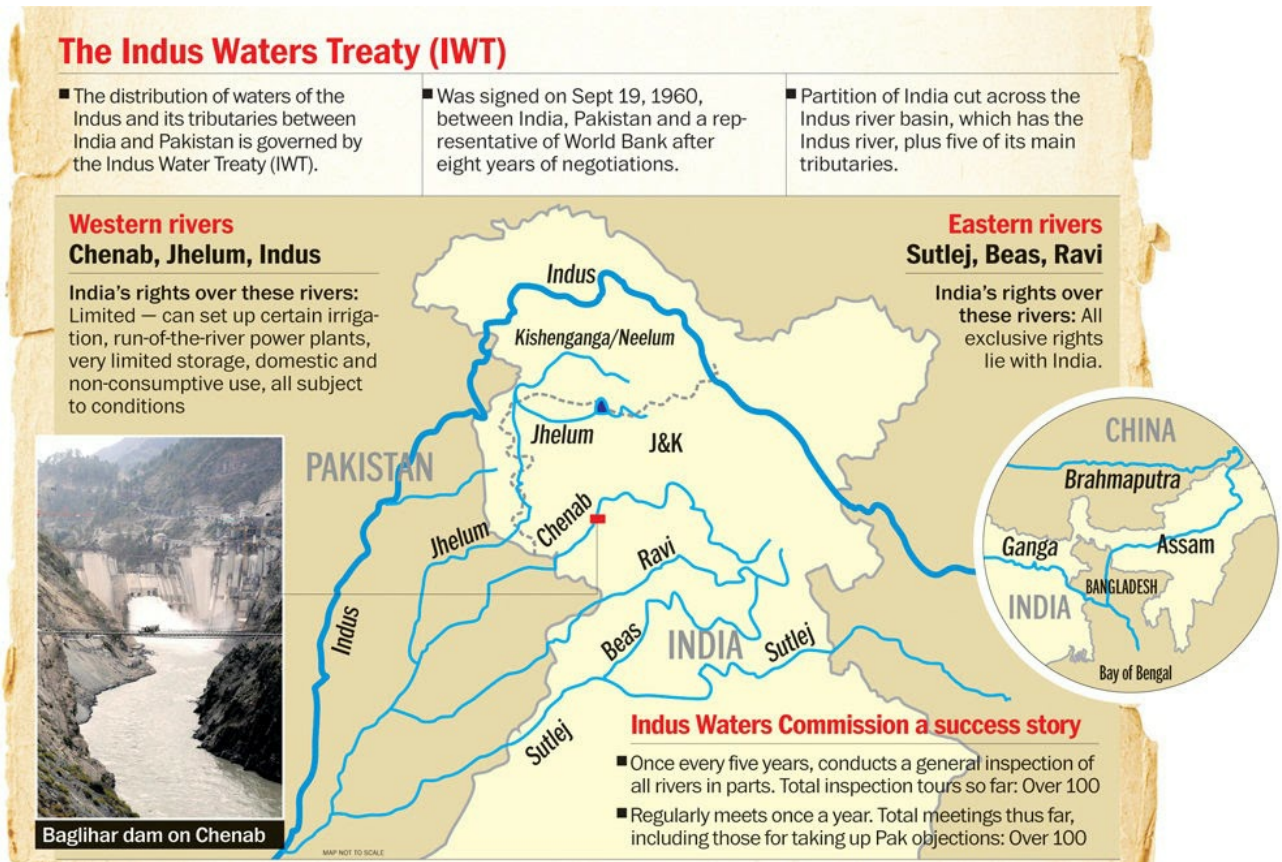
---

The **Indus Water Treaty** (IWT) between India and Pakistan marks its **60<sup>th</sup> anniversary on 19<sup>th</sup> September 2020.**

#### Key Points

---

- **About:**



- The Indus system comprises the main **Indus, Jhelum, Chenab, Ravi, Beas and Sutlej**. The basin is mainly **shared by India and Pakistan** with a small share for China and Afghanistan.
- With the **partition of India in 1947**, waters of Indus rivers system were also divided.
- The sharing formula, devised after prolonged negotiations, sliced the Indus system into two halves. The three ‘**western rivers**’ (**Indus, Jhelum and Chenab**) went to **Pakistan** and the three ‘**eastern rivers**’ (**Sutlej, Ravi and Beas**) were portioned to India.
  - India is **allowed to use 20% water of the western rivers** for irrigation, power generation and transport purposes.
  - IWT **granted 3.6 million acre-feet (MAF) of “permissible storage capacity”** to India on the western rivers but due to poor water development projects, 2-3 MAF of water easily flows into Pakistan.
- It seemed equitable but **India conceded 80.52% of the aggregate water flows** in the Indus system to Pakistan and also **gave Rs. 83 crore in pounds sterling to Pakistan to help build replacement canals** from the western rivers.
  - India conceded its upper riparian position on the western rivers **for the complete rights on the eastern rivers**.
  - It was important to get the waters of the ‘eastern rivers’ for the **Indira Gandhi Canal in Rajasthan** (starts from the **Harike Barrage**, a few kilometers below the confluence of the **Satluj and Beas rivers**) and the **Bhakra Dam** (on the Sutlej River in Bilaspur, Himachal Pradesh) without which both Punjab and Rajasthan would be left dry, severely hampering India’s food production.
- The **World Bank**, as the third party, played a pivotal role in crafting the IWT.

- **Pakistan's Responses:**

- The Pakistan leadership **considers** the sharing of the waters with India an **unfinished business**.
- Pakistan is not comfortable with the fact that **India got away with the total flow of 33 million acre-feet on the eastern rivers**, while it had to share the waters of western rivers.
- Being a lower riparian state, **Pakistan's scepticism of India allows it to increasingly politicise the issue**. It maintains **high troop levels and alertness around the canals on the eastern front**, fearing that India will try to take control of the western rivers.

- **Changing Perspectives in India:**

- Every now and then, there is an **uproar in India for abrogating the IWT** as a response to Pakistan's **cross-border terrorism and tenacity**.

Abrogating IWT would **require a number of politico-diplomatic and hydrological factors to be determined** and also a **political consensus**.

- **Terror attacks** in Indian Parliament in 2001, Mumbai in 2008, and the incidents in Uri in 2016 and Pulwama in 2019 could have prompted India, within the **Vienna Convention on the Law of Treaties**, to withdraw from the IWT. However, on each occasion, India chose not to do so.

- **Vienna Convention on the Law of Treaties**, an **international agreement governing treaties between states** that was drafted by the **International Law Commission** of the **United Nations**.

- It was adopted in 1969 and entered into force in January 1980.

- It is because India **respects its signature and values trans-boundary rivers as an important connector** in the region in terms of both diplomacy and economic prosperity.

- However, in light of India being hesitant to abrogate the treaty, there have been **suggestions to modify it**.

Currently, with a new set of hydrological realities, advanced engineering methods in dam construction and de-siltation, there is an urgent need to modify the treaty.

- **Article XII of the IWT** says that it “**may from time to time be modified**” but carefully notes “**by a duly ratified treaty concluded for that purpose between the two governments**”.

- Pakistan will see no merit in any modification, having already got a good deal in 1960.

- India's best option, therefore, would be to optimise the provisions of the treaty.

- On the developments on western rivers, the **permissible storage capacity on the western rivers needs to be urgently utilised**. Out of the total estimated **capacity of 11406 MW electricity** that can be harnessed from the three western rivers in Kashmir, only 3034 MW has been tapped so far, which also **needs to be looked into**.

- **Tulbul Navigation project on Jhelum, Ratle and Bagliha** hydro projects on Chenab, **Bursar hydroelectric project** on one of the tributaries of the Chenab in Jammu and Kashmir are few of the projects to utilise the waters of western rivers.

Bursar, once completed, will be India's first project on the western rivers to have storage infrastructure.

- India has fast-tracked the work on **Shahpur Kandi dam project**, a **second Sutlej-Beas link in Punjab** and the **Ujh Dam project** in Jammu and Kashmir to **fully utilise the waters of eastern rivers**.

## Way Forward

---

- The role of India, as a responsible upper riparian abiding by the provisions of the treaty, has been remarkable but the country is under pressure to rethink the extent to which it can remain committed to the provisions, as its overall political relations with Pakistan becomes intractable.
- IWT is often cited as an example of the possibilities of peaceful coexistence that exist despite the troubled relationship between both neighbouring countries.

## **Country of Origin Rules: CAROTAR, 2020**

---

### **Why in News**

---

The **Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020** (CAROTAR, 2020), will come into force from 21<sup>st</sup> September 2020. It was notified on 21<sup>st</sup> August 2020.

The importers and other stakeholders were given a 30-day period to familiarise themselves with new provisions.

### **Key Points**

---

- **Stricter Rules:**

Importers will have to ensure that imported goods meet the prescribed '**rules of origin**' provisions for availing concessional rate of customs duty under **Free Trade Agreements** (FTAs).

- Importers have to prove that imported products have undergone value addition of at least 35% in the countries of origin.
- Earlier, merely a **country of origin** certificate, issued by a notified agency in the country of export was sufficient to avail the benefits of FTAs.
- This was exploited in many cases, i.e. the **FTA partner countries have been claiming to have produced the goods in question without having the necessary technological capacity** for the required value addition.

- **Reason for Stricter Rule:**

- The investigation into FTA imports in the last few years has revealed that the **rules of origin, under respective FTAs, were not being followed** in the true spirit.
- Customs officials suspect that China diverts its supplies to India through **Association of Southeast Asian Nations** (ASEAN) nations, abusing rules of origin, to illegally take advantage of **duty-free market access under FTA**.
  - **Major imports to India** come from five ASEAN countries — Indonesia, Malaysia, Thailand, Singapore and Vietnam.
  - The ASEAN FTA allows imports of most items at zero or concessional basic customs duty from the 10-nation bloc.
- Given the latest **border standoff between India and China**, the diversion may surge.

- **Impact:**

- The new rules will make the importer to correctly ascertain the country of origin, properly claim the concessional duty and assist customs authorities in smooth clearance of legitimate imports under FTAs.
- The domestic industry will be protected from misuse of FTAs.

### **Free Trade Agreement**

- It is an **arrangement between two or more countries** or **trading blocs** that primarily agree to **reduce or eliminate customs tariff and non tariff barriers** on substantial trade between them.
- It covers **trade in goods** (such as agricultural or industrial products) or **trade in services** (such as banking, construction, trading etc.).
  - It also **covers other areas such as intellectual property rights (IPRs), investment, government procurement and competition policy** etc.
- India has inked FTAs with several countries, including **Japan, South Korea, Sri Lanka and ASEAN members**.
- **Benefit:**
  - By eliminating tariffs and some non-tariff barriers, FTA partners get easier market access into one another's countries.
  - Exporters prefer FTAs to multilateral trade liberalization because they get preferential treatment over non-FTA member country competitors.

**Source: TH**

---

## **Free Internet Gadget and Package to Poor Students**

---

### **Why in News**

---

The Delhi High Court has directed **both private and government schools** in Delhi to provide **gadgets and Internet packages free of cost to poor students** for attending online classes.

### **Key Points**

---

- **Ruling:** If a school decides to opt for online mode as a medium of instruction, it will have to ensure that students belonging to the **Economically Weaker Section (EWS) and Disadvantaged Group (DG) category** also have access and are able to avail of the same.
  - Private unaided schools will be **entitled to claim reimbursement** of reasonable cost for procurement of the gadget and Internet package from the government under **Section 12(2)** of the **Right to Education (RTE) Act**.

- **Legal Provisions: Intra-class discrimination**, especially between the 75% fee-paying students and the 25% EWS/DG students, **upsets the level playing field** and creates a **digital divide** in the classroom which is violative of **RTE Act, 2009, and Articles 14, 20 and 21 of the Constitution**.
  - According to **RTE Act**, private unaided institutions and special category schools shall provide free and compulsory education to at least **25%** children belonging to DG/EWS category admitted to class I or pre-primary classes. They will also be **reimbursed by the government** for this.
  - **Article 14** of the Constitution of India provides for equality before the law or equal protection of the laws within the territory of India.
  - **Article 20** of the Constitution of India provides that no person shall be convicted of any offence except for violation of the law in force at the time of the offence.
  - **Article 21** provides for the protection of life and personal liberty. It states that no person shall be deprived of his life or personal liberty except according to procedure established by law.
- The ruling is aimed at narrowing the **Covid-19 pandemic-induced digital divide**.
  - According to the recently released **UN Report on the Impact of Covid-19 on Children**, almost **24 million children could drop out** or not have access to school next year due to the **economic impact of Covid-19**.
  - According to the **NSO report on Education**, nearly 4% of rural households and 23% of urban households possessed computers and 24% of the households in the country had internet access.
    - Among persons of age 15-29 years, only 24% in rural areas and 56% in urban areas were able to operate a computer.
  - According to the **Global Education Monitoring Report, 2020**, released by the **United Nations Educational, Scientific and Cultural Organization** (UNESCO), Covid-19 had worsened the inequalities in education systems worldwide.
    - During the height of school closures in April 2020, almost 91% of students around the world were out of school.
    - About 40% of low and lower middle income countries have not supported learners at risk of exclusion during this crisis, such as the poor, linguistic minorities and learners with disabilities.
- **Other Judgments on Right to Internet Access**
  - The **Kerala High Court, in Faheema Shirin vs the State of Kerala case, 2019** declared the **right to Internet access as a fundamental right** forming a part of the right to privacy and the right to education under Article 21 of the Constitution.
  - In the **Supreme Court decision** in the **Anuradha Bhasin case (2020)**, freedom of free speech and expression on the Internet was accepted as a fundamental right under Article 19(1)(a) of the Constitution. Trade, occupation or commerce dependent on the Internet is a fundamental right under Article 19(1)(g).

## Government Initiatives

---

- The Centre has directed State Education Departments **to map the online access available to all their students** in order to **adequately plan curriculum and teaching methods** that can reach such students.

- **New Education Policy: National Education Policy, 2020** aims at making “India a global knowledge superpower” by introducing several changes from the school to college level in the Indian education system with special emphasis on digital education.
- **DIKSHA (Digital Infrastructure for Knowledge Sharing) platform- DIKSHA** is the national platform for school education available for all states and the central government for grades 1 to 12 and was launched in September 2017.  
As part of **PM eVidya** announced under the **Atmanirbhar Bharat** programme, DIKSHA is the ‘**one nation; one digital platform**’ for school education in India.
- **Swayam Prabha TV Channel-** To support and reach those who do not have access to the internet.
- **Online MOOC courses-** Online Massive Open Online Course MOOC courses relating to NIOS (grades 9 to 12 of open schooling) are uploaded on **SWAYAM portal**; around 92 courses have started and 1.5 crore students are enrolled.
- **On Air** – Shiksha Vani, DAISY by NIOS for differently-abled, e-PathShala- Radio broadcasting is being used for children in remote areas who are not online (especially for grades 1 to 5).

## Way Forward

---

The current ruling will help in the bridging the digital divide in Delhi and other states must follow suit. Though **Covid-19** pandemic has necessitated a shift towards online education at a faster pace, the same should be complemented with infrastructure reforms, support and training by the government, aided by civil-society groups.

## Source: TH

---

## World Bamboo Day

---

### Why in News

---

**World Bamboo Day** is celebrated every year on 18<sup>th</sup> September.

Theme of 2020: **Bamboo Now**

### Key Points

---

- **World Bamboo Day** : It was officially established by the **World Bamboo organization** at the **8<sup>th</sup> World Bamboo Congress** held in Bangkok in 2009.
- **World Bamboo Organization** : It was set up at the **1992 International Bamboo Congress in Japan**.  
It is an international coordinating body for bamboo practitioners dedicated to promoting the use of bamboo and bamboo products for the sake of the environment and economy.



- **Properties of Bamboo**

- **Versatile Uses:** Bamboo can be used in 1,500 different ways including as food, a substitute for wood, building and construction material, for handicrafts and paper. Due to its versatile nature and multiple uses, it is also called '**poor man's timber**'.
- **Environmental Benefits:** It can be planted to **reclaim severely degraded sites and wastelands**. It is a good **soil binder** owing to its peculiar clump formation and fibrous root system and hence also plays an important role in soil and water conservation. It is the fastest growing canopy, **releasing 35% more oxygen than trees** and can sequester 12 tonnes of carbon dioxide from per hectare.
- **Use in Covid-19 :** Bamboo has been a key ingredient in new antimicrobial soaps and hand mists developed by scientists from the Philippines to fight the novel **coronavirus**.
- **Nutraceutical Bamboo Shoot:** Bamboo shoots have nutraceutical properties,

according to experts.



- The term 'nutraceutical' is used to describe **medicinally or nutritionally functional foods**.
  - Bamboo shoots or bamboo sprouts are the edible newly sprouted canes of bamboo that form just under the soil and have a firm, crisp texture.
  - Bamboo shoots are emerging as **high-value and safe edibles** and are also among the **cheapest immunity boosters** for increasing the human body's resistance to viral attacks.
  - The **protein** content in fresh bamboo shoots can range between 1.49-4.04%. They also contain **17 amino acids**, eight of which are essential for the human body.
- **Global Market:**
    - The present global market of bamboo shoots is around **1,700 million USD**.
    - More than **3 million tonnes** of bamboo shoots are consumed across the earth annually.
    - According to the **International Network for Bamboo and Rattan (INBAR)**, China exports 68% of the world's bamboo and rattan (a type of Palm Fibre) products valued at 1,112 million USD.

INBAR is a multilateral development organisation, founded in 1997 which promotes environmentally sustainable development using bamboo and rattan.

- **Indian Scenario:**

- According to the **National Bamboo Mission**, India has the highest area (13.96 million hectares) under bamboo.
- It is the **second richest country after China** in terms of bamboo diversity with 136 species.
- The annual production of bamboo in India is **14.6 million tonnes** and the bamboo-rattan industry in the country was worth Rs. 28,005 crore in 2017.
- Bamboo shoot production and consumption in India are **confined mostly to the north-eastern States**.

## Initiatives to Promote Bamboo

---

- **Bamboo Clusters:** Recently, the Union Minister for Agriculture and Farmers' Welfare has virtually inaugurated 22 **bamboo clusters** in 9 states viz. Gujarat, Madhya Pradesh, Maharashtra, Odisha, Assam, Nagaland, Tripura, Uttarakhand and Karnataka.
- **MSP Hike:** Recently, the Central government has revised the **Minimum Support Price (MSP) for Minor Forest Produce (MFP)**.  
MFP includes all non-timber forest produce of plant origin and includes bamboo, canes, fodder, leaves, waxes, resins and many forms of food including nuts, wild fruits, lac, tussar etc.
- **National Bamboo Mission:** The restructured NBM was **launched in 2018-19** for the holistic development of the complete value chain of the bamboo sector and is being implemented in a **hub (industry) and spoke model**.  
It supports local artisans through locally grown bamboo species, which will actualise the goal of **Vocal for Local** and help increase the income of farmers, reducing dependency on imports of raw material.
- **Removal of Bamboo from 'Tree' Category:** The **Indian Forest Act 1927** was **amended in 2017 to remove bamboo for the category of trees**.  
As a result, anyone can undertake cultivation and business in bamboo and its products without the need of a felling and transit permission.
- **Farmer Producer Organisations (FPOs): 10,000 new FPOs will be formed in 5 years.**  
FPOs engage in providing a range of assistance to farmers like **imparting better farm practices, collectivisation of input purchases, transportation, linkage with markets, and better price realisation** as they do away with the intermediaries.

## Way Forward

---

- India needs to promote Bamboo Shoots as a **super-food**. It will help in alleviation of **malnutrition** and hunger.
- **Value-addition in Bamboo shoots** which enhances storage and diversification in new-age food products like vegetable protein concentrates can enhance its market potential and consumer acceptability.
- States need to take forward the objectives of the National Bamboo Mission which would contribute to the **Aatmanirbhar Bharat Abhiyan** through Aatmanirbhar Krishi (self-reliant farming).

## **Arsenic-affected Habitations Increased**

---

### **Why in News**

---

According to data shared in the Parliament, the number of **arsenic-affected habitations in India has increased by 145%** in the last five years (2015-20).

### **Key Points**

---

- **Increase:** India had **1,800 arsenic-affected habitations** in 2015. This increased to 4,421 habitations as of September 2020.
  - **Habitations** are the group of households at a community level in a village.
  - These are the smallest level of settlements that can have between 10-100 households.
- **Regions Affected:** Most of the arsenic-affected habitations lie in the **Ganga and Brahmaputra alluvial plains**. i.e in **Assam, Bihar, West Bengal, Punjab, and Uttar Pradesh (UP)**.
  - **Assam had the highest share** of such habitations (1,853), followed by **West Bengal** (1,383).
  - **Jharkhand**, which did not have any such habitation in 2015, has two now (2020).
  - However, **Karnataka** which had nine habitations in 2015, had none in 2020.
- **Decrease in Fluoride Habitations:** The number of **fluoride** affected habitations has significantly come down from 12,727 in 2015 to 5,485 as of September 2020.
  - **Rajasthan** had the highest number of such habitations (2,956), followed by **Bihar** (861).
- Under **Jal Jeevan Mission (JJM)**, priority has been given to such quality-affected habitations through **Community Water Purification Plants (CWPP)** to meet drinking and cooking needs — until potable water supply through tap connection is provided.
  - **JJM was started in 2019** with the **aim to provide piped water supply** to every household by **2024**.
  - Under JJM, upto 2% of the allocation to states/ UTs can be utilised for **Water Quality Monitoring & Surveillance activities (WQM&S)**.
  - The WQM&S includes setting up and strengthening of water quality testing laboratories, surveillance by community using field test kits (FTKs), awareness generation and educational programmes on water quality, etc.
- A new Sub-programme under **National Rural Drinking Water Programme (NRDWP)** viz. **National Water Quality Sub-Mission (NWQSM)** was started by the Ministry of Drinking Water and Sanitation (now merged with Ministry of Jal Shakti) in 2017 to address the urgent need for providing clean drinking water in about 28000 Arsenic & Fluoride affected habitations.
  - The NWQSM aims to cover all rural populations in Arsenic/Fluoride affected habitations with **clean drinking water on a sustainable basis by March 2021**.
  - The NWQSM was launched with an outlay of **Rs. 25,000 crore**.

- The **NRDWP was started in 2009**, with a major emphasis on ensuring sustainability of water availability in terms of potability, adequacy, convenience, affordability and equity. NRDWP is a **Centrally Sponsored Scheme with 50:50 fund sharing** between the Centre and the States.

### **Arsenic Poisoning**

- Arsenic is naturally present at high levels in the **earth crust** and **groundwater** of a number of countries. It is **highly toxic** in its inorganic form.
- **Contaminated water** used for drinking, food preparation and irrigation of food crops poses the greatest threat to public health from arsenic.
- Long-term exposure to arsenic from drinking-water and food can cause **cancer, skin disease, cardiovascular disease and diabetes**.  
In early childhood exposure, it has been linked to negative impacts on **cognitive development** and **increased deaths in young adults**.
- According to the **WHO's guidelines for drinking water quality (2011)**, the permissible limit of **Arsenic in groundwater is 0.01 mg per litre**.  
However, in India the permissible limit in drinking water has recently been revised from **0.05 mg per litre to 0.01 mg per litre**.
- The most important action in affected communities is the **prevention of further exposure** to arsenic by provision of a **safe water supply**.

### **Fluoride Toxicity**

- Excessive fluoride intake usually occurs through the **consumption of groundwater naturally rich in fluoride**, particularly in warm climates where water consumption is greater, or where high-fluoride water is used in food preparation or irrigation of crops.
- Such exposure may lead to **dental fluorosis (tooth decay)** or **crippling skeletal fluorosis**, which is associated with **bone deformities**.

**Source: DTE**

---

## **Pradhan Mantri Gram Sadak Yojana**

---

### **Why in News**

---

Recently, the **Union Minister of Rural Development** provided information on implementation of the **Pradhan Mantri Gram Sadak Yojana (PMGSY)**, in Rajya Sabha.

### **Key Points**

---

- **Launched on:** 25<sup>th</sup> December, 2000.
- **Objective:** To provide connectivity, by way of an all-weather road to unconnected habitations.

- **Eligibility:** Unconnected habitations of designated population size (500+ in plain areas and 250+ in North-Eastern States, Himalayan States, Deserts and Tribal Areas as per 2001 census) in the core network for uplifting the socio-economic condition of the rural population.
  - An **Unconnected Habitation** is one with a population of designated size located at a distance of at least 500 metres or more (1.5 km of path distance in case of Hills) from an All-weather road or a connected Habitation.
  - **Core Network:** It is that minimal Network of roads (routes) that is essential to provide Basic access to essential social and economic services to all eligible habitations in the selected areas through at least single all-weather road connectivity.
- **Latest Funding Pattern:** The fund allocation to states has been made in subsequent years commensurate with the value of projects sanctioned to states.
 

The **Union Government bears 90% of the project cost** in respect of projects sanctioned under the scheme in **North-Eastern and Himalayan States**, whereas **for other states** the Union Government bears **60% of the cost**.
- **Construction of Rural Roads:** The Rural Roads constructed under the PMGSY will be in accordance with the provision of the **Indian Roads Congress (IRC)**.
  - IRC is the **Apex Body of Highway Engineers** in the country.
  - The IRC was set up in **1934**.
- **PMGSY - Phase I**
  - PMGSY - Phase I was launched in December, 2000 as a 100 % **centrally sponsored scheme**.
  - Under the scheme, 1,35,436 habitations were targeted for providing road connectivity and 3.68 lakh km. for upgradation of existing rural roads in order to ensure full farm to market connectivity.
- **PMGSY - Phase II**
  - The Government of India subsequently launched **PMGSY-II in 2013** for **upgradation of 50,000 Kms of existing rural road network** to improve its overall efficiency.
  - While the ongoing PMGSY - I continued, under PMGSY phase II, the **roads already built for village connectivity was to be upgraded** to enhance rural infrastructure.
  - The cost was **shared between the centre and the states/UTs**.
- **PMGSY - Phase III**
  - Phase III was approved by the Cabinet during July **2019**.
  - It gives priorities to facilities like:
    - **Gramin Agricultural Markets (GrAMs)**  
GrAMs are retail agricultural markets in close proximity to the farm gate, that promote and service a more efficient transaction of the farmers' produce.
    - **Higher Secondary Schools and**
    - **Hospitals.**
  - Under the PMGSY-III Scheme, it is proposed to consolidate **1,25,000 Km** road length in the States. The duration of the scheme is **2019-20 to 2024-25**.

- **Challenges:**
  - Lack of dedicated **funds**.
  - Limited involvement of the **Panchayati Raj Institutions**.
  - **Inadequate execution** and contracting capacity.
  - Less working season and **difficult terrain** particularly in Hill States.
  - **Scarcity** of the **construction materials**.
  - **Security concerns** particularly in **Left Wing Extremism (LWE)** areas.

## Way Forward

---

- Rural Road Connectivity is a key component of Rural Development as it promotes access to economic and social services.
- Further, it helps in generating increased agricultural incomes and productive employment opportunities in India.
- In this regard, the government can consider engagement with international financial institutions to construct basic rural infrastructure.

## Source PIB

---

## Vaibhav Summit

---

### Why in News

---

Vaishwik Bharatiya Vaigyanik (**VAIBHAV**) Summit will be inaugurated on **2<sup>nd</sup> October 2020** - the **birth anniversary of Mahatma Gandhi**.

It will be followed by **online month-long deliberation sessions** among researchers.

### Key Points

---

- **About VAIBHAV Summit:**
  - It is a **global summit of Overseas and Resident Indian scientists** and academicians.
  - **Key areas of discussion** will include: **quantum technologies, artificial intelligence** and machine learning, communications technologies, computational and data sciences and aerospace technologies among others.
- **Objectives:**
  - To bring out the comprehensive roadmap to **leverage the expertise and knowledge of global Indian researchers** for solving emerging challenges.
  - To reflect in-depth on the collaboration and **cooperation** instruments **with academia and scientists in India**.
  - To **create an ecosystem of Knowledge and Innovation** in the country through global outreach.
- **Organisers:** The Summit is a **joint effort of various Science & Technology (S&T) and Academic organisations**, including **Department of S&T, Defence Research and Development Organisation (DRDO)**.

- **Significance:**

- To boost the innovation ecosystem in India, VAIBHAV will add a new dimension to **Atal Innovation Mission (AIM)**.

AIM is Government of India's flagship initiative to promote a culture of innovation and entrepreneurship in the country.

- The summit seeks active support and ideation from Indian Diaspora for developing skills of Indian aspirants in alignment with the **New Educational Policy**.

NEP 2020 aims to pave the way for transformational reforms in school and higher education systems in the country.

- With Indian roots, global outlook and experience, accomplished scientists, researchers and academicians of Indian descent, around the world can play a vital part in the **"Aatmanirbhar Bharat"** initiative.

The initiative is based on 5 pillars- Economy, Infrastructure, System, Vibrant Demography and Demand.

- **Other Government Initiatives involving Overseas Indian:**

- **Pravasi Bharatiya Divas (PBD)** is celebrated on **9<sup>th</sup> January** every year to mark the contribution of Overseas Indian community in the development of India.
- **Know India Program (KIP)** is a flagship initiative of the **Ministry of External Affairs (MEA)** for diaspora engagement which familiarizes Indian-origin youth (18-30 years) with their Indian roots and contemporary India.
- **VAJRA (Visiting Advanced Joint Research) Faculty Scheme** of the **Department of S&T** is a dedicated program exclusively for overseas scientists and academicians with emphasis on Non-resident Indians (NRI) and Persons of Indian Origin (PIO)/Overseas Citizen of India (OCI) to work as adjunct/visiting faculty for a specific period of time in Indian Public funded academic and research institutions.

---

## **Eight Indian Beaches Recommended for Blue Flag**

---

### **Why in News**

---

On the occasion of **International Coastal Clean-Up Day**, for the first time eight beaches of India are recommended for the coveted International eco-label, the **Blue flag certification**.

### **Key Points**

---

- The **eight beaches are:**
  - Shivrajpur in Gujarat,
  - Ghoghla in Daman & Diu,
  - Kasarkod and Padubidri beach in Karnataka,
  - Kappad in Kerala,
  - Rushikonda in Andhra Pradesh,
  - Golden beach of Odisha and
  - Radhanagar beach in Andaman and Nicobar.

- **Blue Flag Certification:**

- Blue Flag beaches are considered the **cleanest** beaches of the world.
- The Blue Flag is one of the world's most recognised **voluntary eco-labels** awarded to beaches, marinas, and sustainable boating tourism operators.
- In order to qualify for the Blue Flag, a series of stringent environmental, educational, safety, and accessibility criteria must be met and maintained.
- The Blue Flag Programme for beaches and marinas is run by the international, non-governmental, non-profit organisation FEE (the **Foundation for Environmental Education**).

FEE (the Foundation for Environmental Education) was established in France in 1985.

- On the lines of Blue Flag certification, India has also launched **its own eco-label BEAMS**.

- **BEAMS**

- On this occasion, India has also launched India's own eco-label BEAMS (**Beach Environment & Aesthetics Management Services**) under **ICZM (Integrated Coastal Zone Management)** project.
- This is launched by the **Society of Integrated Coastal Management (SICOM)** and the Union Ministry of Environment, Forest and Climate Change (MoEFCC).
- The objectives of **BEAMS** program is to:
  - Abate pollution in coastal waters,
  - Promote sustainable development of beach facilities,
  - Protect & conserve coastal ecosystems & natural resources,
  - Strive and maintain high standards of cleanliness,
  - Hygiene & safety for beachgoers in accordance with coastal environment & regulations.

## **Integrated Coastal Zone Management Plan**

---

- **Integrated Coastal Zone Management Plan (ICZM)** is a process for the management of the coast using an integrated approach, regarding all aspects of the coastal zone, including geographical and political boundaries, in an attempt to achieve sustainability.
  - The concept of ICZM was born in **1992** during the Earth Summit of Rio de Janeiro.
  - The specifics regarding ICZM is set out in the proceedings of the summit within Agenda 21.
- **Implementation**
  - It is a **World Bank** assisted project and is being implemented by the Union Ministry of Environment, Forests and Climate Change (MoEFCC).
  - The **National Centre for Sustainable Coastal Management (NCSCM)**, Chennai, is providing scientific and technical inputs.

## **Society of Integrated Coastal Management**

- Society of Integrated Coastal Management (SICOM) has been established under the aegis of the Ministry of Environment, Forests and Climate Change.
- It has a vision for a vibrant, healthy and resilient coastal and marine environment for the continuous and enhanced outflow of benefits to the country and the coastal community.



- SICOM is the national project management unit of India in strategic planning, management, execution, monitoring and successful implementation of the ICZMP-Phase-I.

### **International Coastal Clean-Up Day**

- It has been celebrated across 100 countries since 1986.
- The day is marked each year on the **third Saturday of September** as an initiative of the Washington-based Ocean Conservancy, a volunteer effort for ocean health.

### **Source PIB**

---

## **Nandankanan Zoological Park: Odisha**

---

### **Why in News**

---

Recently, death of two **sloth bears** have been reported from the **Nandankanan Zoological Park**, Bhubaneswar (Odisha).

The exact cause of deaths is not yet known. Earlier, a 28-year-old **Himalayan black bear** died probably due to old age as bears are known to live for about 30 years.

### **Key Points**

---

- **Nandankanan Zoological Park:**
  - It is 15 kms from **Odisha's capital, Bhubaneswar**. It was **inaugurated in 1960**.
  - First zoo in the country to become a **member of the World Association of Zoos & Aquariums (WAZA)**.

WAZA is the global alliance of regional associations, national federations, zoos and aquariums, dedicated to the care and conservation of animals and their habitats around the world.
  - It is recognized as a leading zoo for the **breeding of the Indian pangolin and white tiger**.

Leopards, mouse deer, lions, ratel and vultures are also bred here.
  - It was the **world's first captive crocodile breeding centre**, where **gharials** were bred in captivity in 1980.
  - The **State Botanical Garden of Nandankanan** is one of the pioneering plant conservation and nature education centres of Odisha.

- **Sloth Bears:**



- **Scientific Name:** *Melursus ursinus*
- **Habitat:** Also called honey bear, **Hindi bhalu**, it is a forest-dwelling member of the family **Ursidae** (comprises 8 species of bears) that inhabits tropical or subtropical regions of India and Sri Lanka.
- **Protection Status:**
  - **'Vulnerable'** in the **IUCN Red List**.
  - **Appendix I** in **CITES listing**.
  - **Schedule I** of the **Indian Wildlife Protection Act, 1972**.
- **Threats:** Habitat loss, poaching for body parts and are sometimes captured for use in performances or hunted because of their aggressive behavior and destruction of crops.

- **Himalayan Black Bear:**



- **Scientific Name:** *Ursus thibetanus*
- **Habitat:** Also called **Asiatic black bear**, it inhabits mountainous and heavily forested areas across southern and eastern Asia.
- **Protection Status:**
  - **'Vulnerable'** in the **IUCN Red List**.
  - **Appendix I** in **CITES listing**.
  - **Schedule I** of the **Indian Wildlife Protection Act, 1972**.
- **Threats:** Illegal hunting for body parts, specifically the gallbladder, paws and skiing poses the main threat, together with habitat loss caused by logging, expansion of human settlements and roads.

**Source: TH**

---

**Biotech-KISAN Programme**

---

## Why in News

---

As per the recent information shared by the Union Minister of Science and Technology in Lok Sabha, **Biotech-Krishi Innovation Science Application Network (Biotech-KISAN) programme** plays an important role in taking innovative **biotechnologies** to the farmers.

## Key Points

---

- Biotech-KISAN programme is a **farmer-centric scheme** for farmers, developed by and with farmers under the **Department of Biotechnology, Ministry of Science and Technology**.
- It is a **pan-India program**, following a **hub-and-spoke model** and stimulates **entrepreneurship and innovation in farmers** and **empowers women farmers**. It has a **unique feature** to identify and promote local farm **leadership in both genders**. Such leadership helps to develop science-based farming besides facilitating the transfer of knowledge.
- **Aim:** To **understand the problems** of water, soil, seed and market faced by the farmers and **provide simple solutions** to them.  
The programme links available science and technology to the farm by first understanding the problem of the local farmer and then providing scientific solutions to those problems.
- The **Biotech-KISAN hubs** are expected to fulfil the technology required to generate agriculture and bio-resource related jobs and better livelihood ensuring biotechnological benefits to small and marginal farmers.  
Currently, there are a total of eight Biotech-KISAN Hubs in different Agro-climatic Zones.

## Biotechnology in Agriculture

- **Government supports** research institutes, central and state agriculture universities for competitive research and development and demonstration **activities in agriculture biotechnology** including **organic farming**.
  - It has been supported across the country including **Aspirational Districts**.
  - During the last three years, approximately Rs. 310 crores have been invested in supporting the use of biotechnology in agriculture.
  - The **Integrated Human Resource Development Programme** under the Department of Biotechnology has been implemented to **provide biotechnology trained personnel in various fields** including agriculture.

- **Alternative of Conventional Farming:**

- The **understanding of genetics and biotechnology** could enable farmers to obtain maximum yield from their fields and to minimise the use of fertilisers and chemicals so as to avoid their harmful effects on the environment.
- **Genetically Modified Organisms'** (GMO) use is a possible solution and an alternative path to conventional farming.
  - GMOs have made crops more tolerant to abiotic stresses, reduced reliance on chemical pesticides, reduced post-harvest losses, increased efficiency of mineral usage by plants and enhanced nutritional value of food.
  - For example, **Bt cotton, Bt Brinjal**, etc.
- **Genetically Modified Biopesticides** are biologically based agents used for the control of plant pests.

They **can be living organisms** (nematodes or micro-organisms) or **naturally occurring substances**, such as plant extracts or insect pheromones which can **provide resistance to insects without the need for chemical insecticides**.

**Source: PIB**

---

## **Samarth Scheme for Textile Sector**

---

### **Why in News**

---

The **Ministry of Textiles** is implementing the Samarth-Scheme for Capacity Building in the Textiles Sector.

Samarth Scheme, also known as **Scheme for Capacity Building in the Textile Sector (SCBTS)**, was approved by **Cabinet Committee on Economic Affairs (CCEA)** in 2017 in order to ensure steady supply of skilled manpower in the labour-intensive textile sector.

### **Key Points**

---

- **Objectives :**
  - Provide **demand driven, placement oriented National Skills Qualifications Framework (NSQF) compliant skilling programmes** to create jobs in the organized textile and related sectors, covering the **entire value chain of textile, excluding Spinning and Weaving**.
  - Promote **skilling and skill upgradation** in the traditional sectors of handlooms, handicrafts, sericulture and jute.
  - Enable provision of **sustainable livelihood** either by wage or self employment.
- 18 State Governments have been allocated a training target of 3.6 lakh beneficiaries for conducting **training programmes in traditional and organized sectors**.
- Industry/industry associations are being empanelled for undertaking **industry oriented entry level skilling programmes** in the organized sectors.

**Source: PIB**

---