

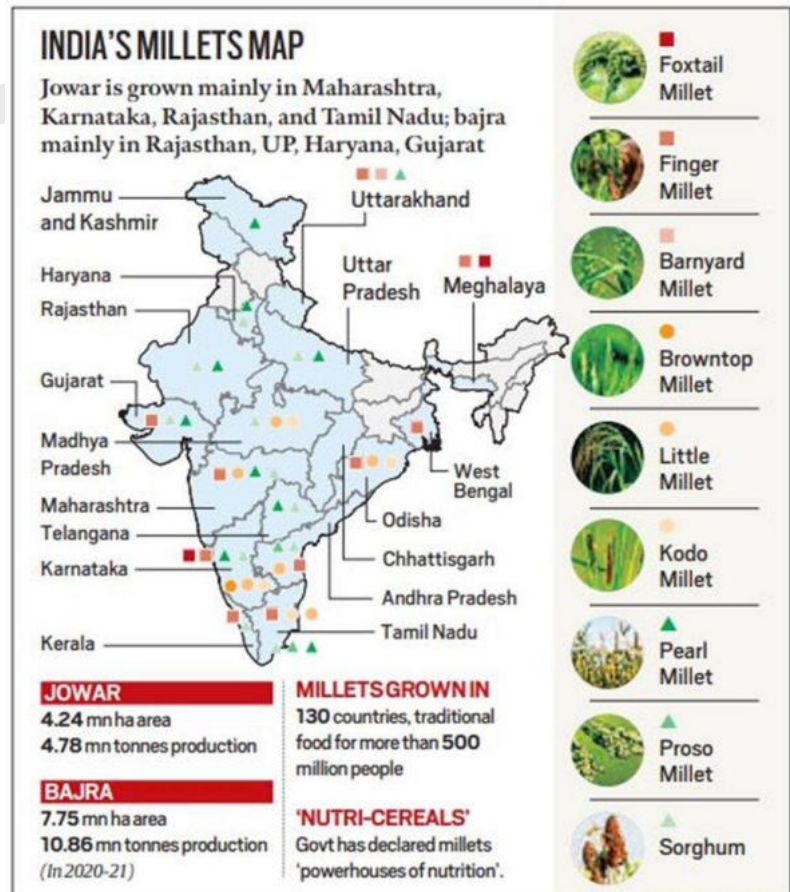
NEWS TODAY

INDIA, BANGLADESH INAUGURATES CROSS-BORDER ENERGY PIPELINE

- **India-Bangladesh Friendship Pipeline (IBFP)**, running from **Siliguri** (India) to **Parbatipur** (Bangladesh), is **first cross border energy pipeline between India and Bangladesh** with a capacity to transport 1 Million Metric Ton Per Annum (MMTPA) of High-Speed Diesel (HSD) to Bangladesh.
 - IBFP, **enhancing energy cooperation** between two countries, is **second cross-border energy pipeline** between **India and its neighbours**.
 - In 2019, India-Nepal opened **South Asia's first cross-border oil pipeline** i.e., **Motihari (Bohar)-Amlekhgunj (Nepal) oil pipeline**.
- **South Asia**, subregion of **Asia**, includes **Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka**.
 - With energy shortage as one of the factors hindering region growth, **Energy Diplomacy or Cross-border energy trade** helps to **strengthen India's relationship** with South Asian countries, and **counter China's growing influence** in region.
- **India's initiatives on South Asia Energy Security**
 - **Development of Hydel Projects** in Afghanistan, Nepal and Bhutan. E.g., **Afghan-India Friendship Dam** (Salma Dam) in Afghanistan.
 - **Development of Non-Renewable and other Renewable Energy** power plants. E.g., **Coal-fired Maitri power plant** in Nepal and **100 MW Solar power plant** in Sri Lanka.

MILLETS CAN HELP TACKLE CHALLENGES OF FOOD SECURITY: PRIME MINISTER

- Inaugurating Global Millets (Shree Anna) Conference at Pusa, New Delhi, PM also launched a **compendium of Indian Millet (Shri Anna) Start-ups and Book of millet (Shri Anna) standards**.
 - Also, **Indian Institute of Millets Research of ICAR** (Indian Council of Agricultural Research) is declared as a **Global Centre of Excellence**.
- Millets, also known as **nutri-cereals**, are a collective group of **small, round seeded (coarse grains) annual grasses** that are grown as **cereal crops/grains** for human food and as fodder.
 - They are called **superfoods** for having nutrients like **protein, Vitamin-A, Iron and Iodine, antioxidants**, etc.
 - India accounts for 80% of Asia's production and 20% of global production.
 - Millets are mainly grown on marginal land in **dry areas of temperate, sub-tropical and tropical regions**.
 - They **require much less water than rice and wheat**, and are mainly grown in rainfed areas.
- **Initiatives to promote Millets**
 - **National Year of Millets** celebrated in **2018**.
 - **Millets notified as nutri-cereals** and included under **POSHAN Mission Abhiyan**.
 - **United Nations General Assembly** declared the year **2023 as International Year of Millets**.



PRADHAN MANTRI MATSYA SAMPADA YOJANA (PMMSY) PROVISIONS TO BE REVISED TO SUIT FISHERMEN'S NEEDS: MINISTRY OF FISHERIES, ANIMAL HUSBANDRY & DAIRYING

- While addressing Sagar Parikrama programme, Ministry stated that **necessary changes to PMMSY will be made to enable traditional fishermen to buy trawlers or other boats for deep-sea fishing.**
 - This is due to difficulties they faced in purchase of deep-sea fishing vessels as per technical specification prescribed in PMMSY scheme.
- PMMSY, launched in 2020 by Ministry of Fisheries, Animal Husbandry & Dairying, aims to **bring about Blue Revolution through sustainable and responsible development of fisheries sector** in India.
 - PMMSY is being implemented in all States and Union Territories for a **period of 5 years from FY 2020-21 to FY 2024-25.**
 - PMMSY is implemented as an umbrella scheme with **two separate Components namely Central Sector Scheme (100% central funding) and Centrally Sponsored Scheme (CSS).**
 - PMMSY targets to increase fish production** to 22 million metric tons by 2024-25; **reduce post-harvest losses** from 20-25% to about 10% etc.
- Other initiatives to promote fisheries sector:** Fisheries & Aquaculture Infrastructure Development Fund (FIDF), 2015; **Kisan Credit Cards** for Fishermen (2018-19) etc.
- Sagar Parikrama Program, launched under **Department of Fisheries**, Ministry of Fisheries, Animal Husbandry and Dairying, aims to promote **responsible fisheries and protect marine ecosystem.**

OBJECTIVES OF PMMSY

Harnessing of fisheries potential

Modernizing value chain, post-harvest management and quality improvement

Enhancing fish production and productivity

Build robust fisheries management and regulatory framework

Doubling fishers and fish farmers' incomes and generation of employment

JHARKHAND GOVERNMENT LAUNCHES JOB PORTAL TO ENSURE 75% LOCAL QUOTA IN PRIVATE SECTOR

- Jharkhand government launched '**Jharniyojan**' portal where all **private establishments have to register** themselves.
 - Portal will act as a **platform for employers to share businesses and manpower-related information** and for candidates looking for jobs.
 - Employers who make use of portal will have to **adhere to 'Jharkhand State Employment of Local Candidates in Private Sector Act, 2021'**.
 - As per act, **75% of jobs in private sectors** with salaries up to Rs 40,000 are to be **reserved for "locals"** in state.
 - It applies to **all establishments which are in private sector and where 10 or more people** are employed.
- Rationale behind local quota in private sector:** Provide job opportunities for unemployed youth in state and reduce competition; **tackle regional disparities in growth; tackle issue of left-wing extremism** in state etc.
- SC judgements**
 - Dr Pradeep Jain case (1984):** Court expressed an opinion that legislation for "sons of the soil" would be unconstitutional.
 - Sunanda Reddy v State of Andhra Pradesh (1995):** It struck down a state government policy that gave **5% extra weightage to candidates** who had studied with **Telugu as the medium** of instruction.
- Concerns associated with local quota in private sector**
 - Impacts **ease of doing business** in concerned State and **increases compliance burden** on employers.
 - Violates **fundamental right to freedom of business** under Article 19(1)(g) of employer.

COASTAL EROSION IN INDIAN STATES

- Recently, a global study has predicted that more than 200 km of **Odisha's shoreline** will face **erosion by 2050.**
 - Also, a Private Member Resolution recommending the government to appoint a high-level inquiry commission to **investigate coastal erosion in Goa.**
- Coastal erosion is **wearing away of coastal land by sea.** Caused by **natural and anthropogenic reasons (refer image)**, major local reasons behind coastal erosion in India are
 - Increasing Cyclonic activities; Illegal Mining** of rare heavy minerals from beach sand; Destruction of natural barriers; etc.
- Impact of coastal erosion:** Water shortage and food insecurity; **destruction of animal habitats** and natural buffers like mangroves; **hampers livelihood of people** as they would be **vulnerable to rising sea levels** etc.
- Initiatives against Coastal Erosion**
 - Coastal Regulation Zone Notification, 2019** to conserve coasts and marine areas while ensuring livelihood of local communities.
 - Delineation of Hazard line** for entire coast of India and National Strategy for Coastal Protection for all states/UTs.
 - Integrated Coastal Zone Management Project (ICZMP)** for holistic and sustainable development of coast.

Natural Causes

Action of Waves and Tides

Winds

Storms

Nearshore Currents and Sea Level Rise

Anthropogenic Causes

Dredging and beach sand mining

Construction of Harbors and coastal structures

River water regulation or hardening of shorelines

Destruction of Mangroves, natural buffers or beach nourishment

INDIA SHOULD TARGET \$350BN E-COMM EXPORTS BY 2030: GLOBAL TRADE RESEARCH INITIATIVE (GTRI) REPORT

- Report titled 'Making E-Commerce Exports a Bigger Success Story than IT: Blueprint for realising India's E-Commerce Exports Potential' highlights that

➤ With Global Business to Consumer (B2C) E-Commerce exports estimated to grow from \$800 billion to \$8 trillion by 2030, India is in prime position to benefit from it due to India's **higher profit margins per unit of export**, skilled artisans, growing market, etc.

- E-Commerce, or **electronic commerce**, refers to "buying and selling of goods and services by companies and individuals over internet" (refer image for its types).

➤ Currently, E-Commerce exports account for only **\$2 billion**, less than **0.5% of India's total goods export basket** due to

- **Lack of Comprehensive Rules** - increasing compliance burden on small firms; **Lack of Branding** of products; **Poor ecosystem for commercial export transactions**.

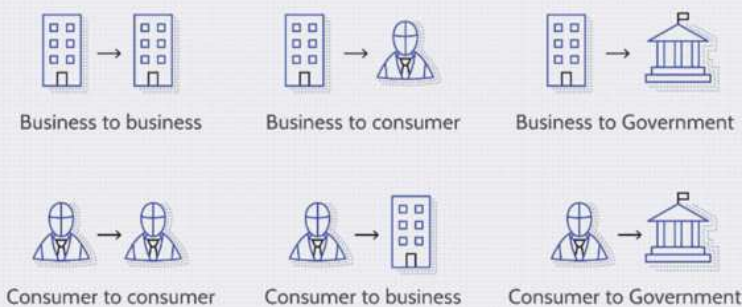
Recommendations

➤ Issue **separate e-commerce export policy** by including provisions for business development and easing regulatory burden.

➤ Set up **E-Commerce National Trade Network** to bring together various stakeholders to create **central technology platform**.

➤ Create **separate customs codes** for E-Commerce shipments and allow **Green Channel clearance** for E-Commerce shipments.

Types of E-Commerce



Current Government initiatives for E-commerce exports

- **India Trade portal** to provide trade-related information.
- **Indian Business Portal** to help MSME exports gain global digital presence etc.
- **Ease of Logistics portal**, India's first e-marketplace to connect exporters and logistics service providers.

ALSO IN NEWS



Enemy properties

- Ministry of Home Affairs (MHA) has started the **process for eviction and sale of enemy properties**.
- Enemy properties refer to **immovable assets left behind by people who have taken citizenship of Pakistan and China**.
 - Administration of Enemy properties are vested with **Custodian of Enemy Property for India (CEPI) under MHA, a statutory authority** under provisions of **Enemy Property Act, 1968**.



Aadhaar Based Payment System (ABPS) and National Automated Clearing House (NACH)

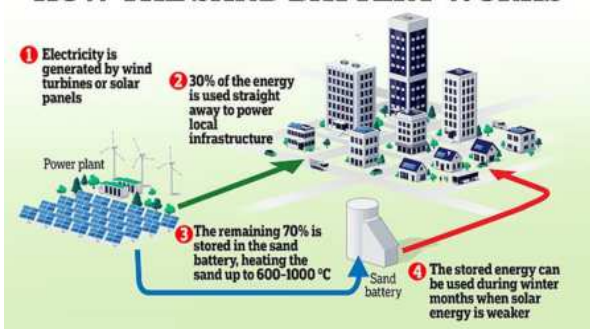
- Central government has continued the mixed payment mode, i.e., ABPS and NACH, for payment of wages under MGNREGS.
- Developed by the **National Payments Corporation of India (NPCI)**
 - ABPS is a **bank led model** which enables payment to **Aadhar-linked bank account** in a **transparent manner**.
 - NACH is a **web-based solution** to facilitate **interbank, high volume, electronic transactions** of repetitive and periodic nature.
- For MGNREGS payment, NACH system is used when beneficiary account is not linked with ABPS.



Sand Battery

- Recently, Finland has installed **world's first sand battery** that can store heat from renewable energy sources for months.
- Sand Battery is a **high temperature thermal energy storage** that uses sand or sand-like materials as its storage medium. It **stores energy in sand as heat**.
 - Its main purpose is to **work as a high-power and high-capacity reservoir for excess wind and solar energy**.
 - Energy is stored as heat, which can be **used to heat homes, or to provide hot steam and high temperature process heat to industries** that are often fossil-fuel dependent.

HOW THE SAND BATTERY WORKS



 <p>Biomass Co-firing</p>	<ul style="list-style-type: none"> Commission for Air Quality Management (CAQM) has directed 11 coal based thermal power plants to take immediate steps to start co firing bio-mass pellets. Biomass Co-firing refers to adding biomass as a partial substitute fuel in high efficiency coal boilers. Coal and biomass are co-combusted in boilers that have been designed to burn coal. <ul style="list-style-type: none"> It is an effective way to curb emissions from open burning of crop residue. It also decarbonizes the process of electricity generation using coal.
 <p>Vilayati Kikar (Prosopis juliflora)</p>	<ul style="list-style-type: none"> In a pilot project, work to remove Vilayati Kikar will start at Central Ridge in Delhi in order to restore its natural biodiversity. Vilayati Kikar is an invasive species first imported into India by British as an exotic and decorative species. <ul style="list-style-type: none"> Also known as Vilayati Babool, it was imported from Mexico - where it is known as mesquite. An important fuelwood in dry regions, it can survive hostile conditions (like drought). <ul style="list-style-type: none"> Being an alien species, it killed off native species by lowering groundwater table.
 <p>Terminator zones</p>	<ul style="list-style-type: none"> In a recent study, researchers explained the possibility of extra-terrestrial life on far-off exoplanets within a special region known as "terminator zone". Terminator zones is a ring on planets that have one side that is always facing its star and one side that is always dark. <ul style="list-style-type: none"> Terminator is the dividing line between day and night sides of planet. It could exist in "just right" temperature zone between too hot and too cold. Terminator zone planet can retain liquid water. If the planet is mostly covered in water, then water facing the star would likely evaporate and cover entire planet in thick layer of vapour. But if there's land, this effect shouldn't occur.
 <p>Consortium on Vulnerability to Externalizing Disorders and Addictions (c-VEDA) Project</p>	<ul style="list-style-type: none"> A recent study as part of long-term project called C-Veda evaluated the effect of biological and environmental risk on cognitive development. C-Veda is an India-United Kingdom (UK) project, jointly funded by Indian Council for Medical Research (ICMR) and Newton Grant from Medical Research Council (MRC), United Kingdom. <ul style="list-style-type: none"> It aims to investigate if environmental and genetic risk factors in industrialised countries and emerging societies shape brain function and behaviour in distinct way. c-Veda has established largest neurodevelopmental database in India, comparable to global datasets, with detailed environmental characterization.
 <p>Laccase enzyme</p>	<ul style="list-style-type: none"> Recently, an enzyme called laccase generated by a group of fungi has been found capable of degrading a variety of hazardous industrial organic effluents. Laccase enzyme belongs to enzyme family of multicopper oxidases (MCOs). <ul style="list-style-type: none"> They are classified as benzenediol oxygen reductases and are also known as urushiol oxidases and p-diphenol oxidases. They have potential to degrade several industrial and biological compounds. They are capable of oxidizing a large number of phenolic and non-phenolic molecules due to their low substrate specificity, using oxygen as electron acceptor and generating water as a by-product.
 <p>Personalities in News</p>	<p>Maharaja Sayajirao Gaekwad III</p> <ul style="list-style-type: none"> Born at Kavlana village of Nasik, he was the Maharaja of Baroda (now Vadodara) State from 1875 to 1939. As a ruler, in 1906, he made primary education free and compulsory in his state and introduced social reforms such as ban on child marriage, legislation on divorce, removal of untouchability etc. Economic development initiatives: Establishment of railroad, building of reservoirs for drinking water and founding of Bank of Baroda in 1908. He patronized Dr. B.R. Ambedkar, Dadabhai Naoroji and Sri Aurobindo Ghosh. Virtues: Visionary ruler and great statesman, he displayed virtues of strategic thinking, risk-taking and persistence.