

# **Agriculture Census**

For Prelims: Agriculture Census, Technology for Farmers, Related Government Initiatives

**For Mains:** Significance of Agriculture Sector in Economy, Technology in aid of farmers, Government Initiatives

## Why in News?

Recently, the Ministry of Agriculture & Farmers' Welfare launched "The Eleventh Agricultural Census (2021-22)."

This computation will bring huge benefits in a vast and agricultural country like India.

## What do we need to know about the Agriculture Census?

- About:
  - Agriculture Census is conducted every 5 years, which is being undertaken now after delay due to the Covid - 19 Pandemic.
  - Entire Census operation is conducted in three phases and operational holding is taken as a statistical unit at micro level for data collection.
    - Based on the agriculture census data collected in three phases, the Department brings out three detailed reports analyzing trends on various parameters at All India and States/UTs level.
      - District/Tehsil level reports are prepared by the respective States/UTs.
  - Agricultural Census is the main source of information on a variety of agricultural parameters at a relatively minute level, such as the number and area of operational holdings, their size, class-wise distribution, land use, tenancy and cropping pattern, etc.
- Eleventh Census:
  - The field work of the agricultural census will start in August 2022.
  - This is the first time that data collection for agricultural census will be conducted on smartphones and tablets, so that data is available in time.
  - It includes:
    - Use of digital land records like land title records and survey reports
    - Collection of data through app/software using smartphone/tablet.
    - Complete **enumeration of all villages** in states with non-land records during Phase-I as done in states having land records.
    - Real time monitoring of progress and processing.
  - Most of the States have digitized their land records and surveys, which will further accelerate the collection of agricultural census data.
  - The use of digitized land records and the use of mobile apps for data collection will enable the creation of a database of operational holdings in the country.

## What do we mean by Digital Agriculture?

#### About:

- Digital Agriculture is ICT (Information and Communication Technologies) and data ecosystems to support the development and delivery of timely, targeted information and services to make farming profitable and sustainable while delivering safe, nutritious and affordable food for all.
- Examples:
  - **Agricultural** <u>biotechnology</u> is a range of tools, including traditional breeding techniques, that alter living organisms, or parts of organisms, to make or modify products, improve plants or animals, or develop microorganisms for specific agricultural uses.
  - <u>Precision agriculture (PA)</u> is an approach where inputs are utilised in precise amounts to get increased average yields, compared to traditional cultivation techniques such as agroforestry, intercropping, crop rotation, etc. It is based on using ICTs.
  - <u>Digital and wireless technologies</u> for data measurement, Weather monitoring, Robotics/drone technology, etc.

#### Benefits:

- Farm Machinery Automation:
  - It allows fine-tuning of inputs and reduces demand for manual labour.
- Remote Satellite Data:
  - Remote satellite data and in-situ sensors improve the accuracy and reduce the cost of monitoring crop growth and quality of land or water.
  - Freely available and high-quality satellite imagery dramatically reduces the cost
    of monitoring many agricultural activities. This could allow governments to
    move towards more targeted policies which pay (or penalise) farmers based on
    observed environmental outcomes.
- Traceability Technologies and Digital Logistics:
  - These services offer the potential to streamline agri-food supply chains, while also providing trusted information for consumers.
- Administrative Purpose:
  - In addition to monitoring compliance with environmental policies, digital
    technologies enable automation of administrative processes for agriculture
    and the development of expanded government services, such as in relation
    to extension or advisory services.
- Maintenance of Land Records:
  - Using the technology, the data related to a large number of landholdings can be appropriately tagged and digitised.
    - It will not only help better targeting but also reduce the quantum of land disputes in courts.

## What Initiatives has the Government taken for Digital Agriculture?

- AgriStack:
  - The Ministry of Agriculture and Farmers Welfare has planned creating 'AgriStack' a collection of technology-based interventions in agriculture.
  - It will create a unified platform for farmers to provide them end to end services across the agriculture food value chain.
- Digital Agriculture Mission:
  - This has been initiated for 2021 -2025 by the government for projects based on new technologies like <u>artificial intelligence</u>, <u>block chain</u>, <u>remote sensing and GIS</u> <u>technology</u>, <u>use of drones and robots</u> etc.
- Unified Farmer Service Platform (UFSP):
  - UFSP is a combination of **Core Infrastructure**, **Data**, **Applications and Tools** that enable **seamless interoperability** of various public and private IT systems in the agriculture ecosystem across the country.
  - UFSP is envisaged to play the following role:
    - Act as a central agency in the agri ecosystem (like UPI in the e Payments)
    - Enables **Registration of the Service Providers** (public and private) and the Farmer Services.

- Enforces **various rules and validations required** during the service delivery process.
- Acts as a **Repository of all the applicable standards,** API's (Application Programming Interface) and formats.
- Act as a **medium of data exchange** amongst various schemes and services to enable comprehensive delivery of services to the farmer.
- National e-Governance Plan in Agriculture (NeGP-A):
  - A Centrally Sponsored Scheme, it was initially launched in 2010-11 in 7 pilot States, which aims to achieve rapid development in India through use of ICT for timely access to agriculture related information to the farmers.
  - In 2014-15, the scheme was further extended for all the remaining States and 2 UTs.
- Other Digital Initiatives:
  - Kisan Call Centres
  - Kisan Suvidha App
  - Agri Market App
  - Soil Health Card (SHC) Portal

## **Way Forward**

- Policymakers will need to consider potential benefits, costs and risks, and to understand the
  factors affecting technology uptake so that interventions can be targeted to where there is a
  market failure, or a public interest.
- Understanding how technology can help in different components of the policy cycle, and may require government bodies to expand their skillsets, invest in technology and training, or partner with other actors (both government and non-government).
- There is a need to build a robust digital infrastructure in the country consisting of satellite imaging, soil health information, land record, cropping pattern and frequency, market data, and others.
- Data efficiency can be increased through <u>Digital Elevation Model (DEM)</u>, <u>Digital Topography</u>, <u>Land Use & Land Cover</u>, <u>Soil Map</u>, <u>etc.</u>

## **UPSC Civil Services Examination, Previous Year Questions (PYQs)**

# Q. In the context of India's preparation for Climate -Smart Agriculture, consider the following statements:

- 1. The 'Climate-Smart Village' approach in India is a part of a project led by the Climate Change, Agriculture and Food Security (CCAFS), an international research programme.
- 2. The project of CCAFS is carried out under Consultative Group on International Agricultural Research (CGIAR) headquartered in France.
- 3. The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India is one of the CGIAR's research centres.

#### Which of the statements given above are correct?

(a) 1 and 2 only

**(b)** 2 and 3 only

**(c)** 1 and 3 only

(d) 1, 2 and 3

Ans: (d)

#### **Explanation:**

■ The Climate-Smart Village project in India is a CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). The CCAFS started piloting the Climate-Smart Village in 2012 in Africa (Burkina Faso, Ghana, Mali, Niger, Senegal, Kenya, Ethiopia, Tanzania, and Uganda) and South Asia (Bangladesh, India, and Nepal). Hence, statement 1 is correct.

- Climate Change, Agriculture and Food Security (CCFAS) is carried out under CGIAR (formerly the Consultative Group for International Agricultural Research). The Headquarters of CGIAR is in Montpellier, France. CGIAR is a global partnership that unites international organizations engaged in research about food security. Hence, statement 2 is correct.
- International Crops Research Institute for the Semi- Arid Tropics (ICRISAT) is a CGIAR Research Center. ICRISAT is a non-profit, non-political public international research organization that conducts agricultural research for development in Asia and sub-Saharan Africa with a wide array of partners throughout the world. Hence, statement 3 is correct.
- Therefore, option (d) is the correct answer.

**Source: PIB** 

# **Curbing Malnutrition in India**

For Prelims: NFHS-5, Malnutrition, Stunting, Wasting.

For Mains: Findings of NFHS-5, Health, Issues related to women, Population and associated issues.

## Why in News?

Recently, the Ministry of Women and Child Development has released targets to Curb Malnutrition in India.

#### What are the Targets released to Curb Malnutrition?

- Aims at reducing stunting and under-nutrition (underweight prevalence) among children below 6 years by 2% each year.
- Aims to Reduce, low birth weight by 2% per annum, <u>Anaemia</u> among children between six and 59 months, as well as women and adolescent girls (15 to 49 years), by 3% per annum.
  - Anaemia is a medical condition in which the blood doesn't have enough healthy red blood cells.
- Highlighted the NFHS-5 Report, which comprises of detailed information on key domains of population, such as:
  - health and family welfare, <u>fertility</u>, family planning, infant and child mortality, maternal and child health, nutrition and anaemia, morbidity and healthcare, <u>women's</u> <u>empowerment</u> etc.

## What are the Findings of the NFHS-5?

- Data on Stunted Children:
  - Meghalaya has the highest number of stunted children (46.5%), followed by Bihar (42.9%).
  - Maharashtra has 25.6% wasted children (weight for height) the highest followed by Gujarat (25.1%).
  - Jharkhand has the highest percentage of women (26%), between 15 and 49 years, who
    have a below-normal <u>Body Mass Index (BMI)</u>.
- Other Findings:

- The **Total Fertility Rates (TFR)**, an average number of children per woman, has declined **from 2.2 to 2.0** at the national level between NFHS-4 & 5.
- Overall <u>Contraceptive Prevalence Rate (CPR)</u> has increased substantially from 54% to 67% in the country.
- Institutional Births have increased substantially from 79% to 89% in India.
- Stunting has reduced **from 38.4% to 35.5%, wasting from 21.0% to 19.3%** and underweight prevalence is down from 35.8% to 32.1%.
- Women (15-49 years) whose BMI (Body Mass Index) is below normal has reduced from 22.9% in NFHS-4 to 18.7% in NFHS-5.

#### What are Malnutrition and Related Initiatives?

#### About:

- Malnutrition is the condition that develops when the body is deprived of vitamins, minerals and other nutrients it needs to maintain healthy tissues and organ function.
- Malnutrition occurs in people who are either undernourished or over nourished.

#### Initiatives:

- <u>POSHAN Abhiyaan</u>: The government of India has launched the National Nutrition Mission (NNM) or POSHAN Abhiyaan to ensure a "Malnutrition Free India" by 2022.
- Anemia Mukt Bharat Abhiyan: Launched in 2018, the mission aims at accelerating the annual rate of decline of anaemia from one to three percentage points.
- Mid-day Meal (MDM) scheme: It aims to improve nutritional levels among school
  children which also has a direct and positive impact on enrolment, retention and
  attendance in schools.
- The National Food Security Act (NFSA), 2013: It aims to ensure food and nutrition security for the most vulnerables through its associated schemes and programmes, making access to food a legal right.
- **Pradhan Mantri Matru Vandana Yojana (PMMVY)**: Rs.6,000 is transferred directly to the bank accounts of pregnant women for availing better facilities for their delivery.
- Integrated Child Development Services (ICDS) Scheme: It was launched in 1975 and the scheme aims at providing food, preschool education, primary healthcare, immunization, health check-up and referral services to children under 6 years of age and their mothers.

## **Way Forward**

#### • Increase Financial Commitments:

• There is a **greater need to increase investment in women and children's health** and nutrition to ensure their sustainable development and improved quality of life.

## Outcome-oriented Approach:

- India must adopt an outcome-oriented approach on nutrition programmes.
- There has to be direct engagement with nutritionally vulnerable groups (this
  includes the elderly, pregnant women, those with special needs and young children), and
  contribute toward ensuring last-mile delivery of key nutrition services and interventions.

#### Basic Education and General Awareness:

- Various studies highlight a strong link between mothers' education and improved access and compliance with nutrition interventions among children.
- We must ensure the young population a competitive advantage, nutrition and health are foundational to that outcome.

#### Programmes' Monitoring and Evaluation:

- There should be a process to monitor and evaluate programmes and address systemic and on the ground challenges.
- There is a need to deliberate over effective policy decisions, monitor the implementation of schemes, and **review nutritional status across States.**

#### Source: IE

# **Replacement Level Fertility**

For Prelims: Replacement Fertility Rate, National Family Health Service, Related Government Schemes

**For Mains:** Significance of growing/ declining population, importance of family planning, National Family Health Survey, government's initiatives

#### Why in News?

Recently, the **Government of India** reported that India has achieved **replacement level fertility**, with as many as **31 States/Union Territories** reaching a <u>Total Fertility Rate</u> of **2.1** or less.

- Between 2012 and 2020, India added more than 1.5 crore additional users for modern contraceptives thereby increasing their use substantially.
- Government also unveiled the India Family Planning 2030 vision document.

## What do we know about Replacement Level Fertility?

- Total Fertility Rate of about 2.1 children per woman is called Replacement-level fertility.
  - TFR lower than 2.1 children per woman indicates that a generation is not producing enough children to replace itself, eventually leading to an outright reduction in population.
  - Total fertility rate (TFR) in simple terms refers to the total number of children born or likely to be born to a woman in her lifetime if she were subject to the prevailing rate of agespecific fertility in the population.
- India's total fertility rate (TFR) has declined from 2.2 in 2015-16 to 2.0 in 2019-21, indicating the significant progress of population control measures, revealed the report of the fifth round of the National Family Health Survey (NFHS-5).

## What is India Family Planning 2030 Vision?

- Focus Areas:
  - Strategies to overcome teenage childbearing, lack of male participation in awareness programmes, migration and lack of access to contraceptives have been identified as priorities.
- Contraceptives:
  - Modern contraceptive prevalence Rate:
    - Women with Migrant Husband:
      - 35% in Bihar and 24% in UP
      - It is mostly driven by lack of contraceptive preparedness before husband's arrival, inability to procure contraceptives due to inaccessibility to health facilities and stigma around procuring contraceptives when the husband was away.
    - Women with Resident Husband:
      - 47% in Bihar and 36% in UP
  - Although **modern contraceptive use** among married adolescents and young women have increased, it remains low.
    - Married adolescent girls and young women reported high unmet need for contraception.
  - In several districts, more than 20% of women marry before they become adults.
    - The districts are located in Bihar (17), West Bengal (8), Jharkhand (7), Assam (4) and two each in UP, Rajasthan and Maharashtra.

- The same districts have seen low use of modern contraceptives.
- The vision also included a plan to use the private sector for providing modern contraceptives.
  - Private sector contributes 45% share of pills and 40% share of condoms. For other reversible contraceptives like injectables, the share is 30% and 24% for Intrauterine contraceptive device (IUCD).

## How did India achieve the Replacement Level Fertility?

#### Women Empowerment:

The latest data also show significant progress on several indicators related to **fertility**,
 **family planning**, age at marriage and women's empowerment — all of which have
 contributed to the decrease in TFR.

#### Contraceptives:

• Between 2012 and 2020, India added more than 1.5 crore additional users for modern contraceptives thereby increasing their use substantially.

#### Reversible Spacing:

 Introduction of new reversible spacing (gaps between children) methods, wage compensation systems to undergo sterilisation, and the promotion of small family norms also worked well over the years.

#### Government's Initiatives:

- Mission Parivar Vikas:
  - The Government has launched **Mission Parivar Vikas** in 2017 for substantially increasing **access to contraceptives and family** planning services in146 high fertility districts with TFR of 3 and above in seven high focus states.
- National Family Planning Indemnity Scheme (NFPIS):
  - This scheme was launched in the year 2005, under this scheme clients are insured
    in the eventualities of death, complication and failure following
    sterilization.
- Compensation scheme for Sterilization Acceptors:
  - Under the scheme, the Ministry of Health and Family Welfare provides compensation for loss of wages to the beneficiary and also to the service provider (& team) for conducting sterilizations from the year 2014.

# What is the National Family Health Survey?

#### About:

 The National Family Health Survey is a large-scale, multi-round survey conducted in a representative sample of households throughout India.

#### Conducted by:

- The Ministry of Health and Family Welfare (MoHFW) has designated the International Institute for Population Sciences (IIPS) Mumbai, as the nodal agency for providing coordination and technical guidance for the survey.
- IIPS collaborates with a number of Field Organizations (FO) for survey implementation.

#### Objectives:

- Each successive round of the NFHS has had two specific goals:
  - To provide essential data on health and family welfare needed by the Ministry
    of Health and Family Welfare and other agencies for policy and programme
    purposes.
  - To provide information on important emerging health and family welfare issues.
- The survey provides state and national information for India on:
  - Fertility
  - Infant and child mortality
  - The practice of family planning
  - · Maternal and child health
  - Reproductive health
  - Nutrition
  - Anaemia

- Utilization and quality of health and family planning services.
- NFHS 5 Report:
  - The Total Fertility Rate (TFR) has further declined from 2.2 to 2.0 at the national level between NFHS 4 (2015-16) and NFHS 5 (2019-20).
  - There are **only five states in India which are above replacement level of fertility** of 2.1. These states are Bihar, Meghalaya, Uttar Pradesh, Jharkhand and Manipur.

## **Way Forward**

- Although India has achieved replacement level fertility, there is still a significant population in the reproductive age group who must remain at the centre of our intervention efforts.
- India's focus has traditionally been on the supply side, i.e. the providers and delivery systems but now it's time to focus on the demand side which includes family, community and society.
- Significant change is possible with this focus, instead of an incremental change.

## **UPSC Civil Services Examination, Previous Year Questions (PYQs)**

- Q1. "Empowering women is the key to control the population growth." Discuss. (2019)
- Q2. Critically examine the effect of globalization on the aged population in India. (2013)
- **Q3.** Discuss the main objectives of Population Education and point out the measures to achieve them in India in detail. **(2021)**

**Source: TH** 

# **Deep Sea Mining**

**For Prelims:** Deep-sea mining, Indian National Centre for Ocean Information Services (INCOIS), United Nations Convention on the Law of the Sea (UNCLOS), Deep Ocean Mission, offshore ocean thermal energy conversion (OTEC)

For Mains: Deep Sea Mining and its Implications

## Why in News?

Recently, the Minister of State of Science & Technology presented a national science award to Indian scientists who conducted the world's first locomotive trials of a deep-sea mining system in the central Indian ocean.

- The Minister presented the award at the 16<sup>th</sup> Foundation Day of the Ministry of Earth Sciences.
  - Also, inaugurated a first-of-its-kind and state-of-art fully automated buoy-based coastal observation and water quality nowcasting system for the Indian Ocean which was developed by <u>Indian National Centre for Ocean Information Services</u>

## What is the Nowcasting System?

- In this method, radar and satellite observations of local atmospheric conditions are processed and displayed rapidly by computers to project weather several hours in advance.
  - Nowcasting system to benefit various stakeholders, including coastal dwellers, fisherfolk, maritime industry, researchers, and agencies dealing with pollution, tourism, fisheries, and the coastal environment.

## What is Deep Sea Mining?

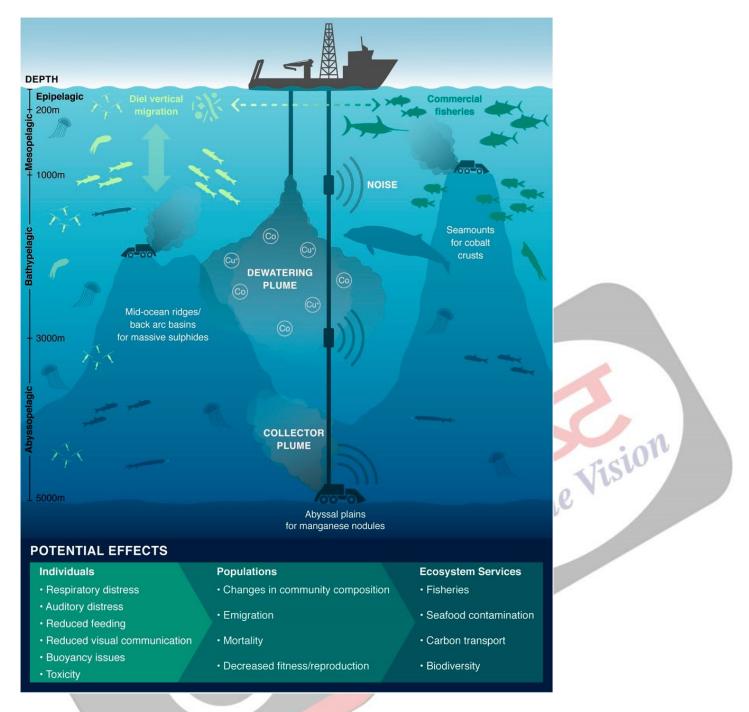
#### About:

- The part of the ocean that lies **below a depth of 200 meters** is defined as the deep sea, and the process of extracting minerals from this area is known as deep-sea mining.
- According to International Seabed Authority, an agency under the <u>United Nations</u>
   <u>Convention on the Law of the Sea (UNCLOS)</u> for monitoring all activities related to mineral
   resources in the deep sea, the international seabed is the area that lies beyond the limits of
   national jurisdiction and represents around 50% of the total area of the world's oceans.



#### Issues:

- It could severely harm marine biodiversity and ecosystems,
- The digging and gauging of the ocean floor by machines can alter or destroy deepsea habitats.
- This leads to the loss of species, many of which are found nowhere else, and the fragmentation or loss of ecosystem structure and function.
- It will stir up fine sediments on the seafloor, creating plumes of suspended particles.
  - This is exacerbated by mining ships discharging wastewater at the surface.
- Species such as whales, tuna, and sharks could be affected by noise, vibrations, and light pollution caused by mining equipment and surface vessels, as well as potential leaks and spills of fuel and toxic products.



## What is India's Deep Ocean Mission?

- Deep Ocean Mission seeks to develop the technologies required for exploring and, then, extracting minerals in the deep seabed,
- It would develop a manned submersible that can carry three people to a depth of 6,000 meters in the ocean with a suite of scientific sensors and tools.
- It includes an integrated mining system that will be developed to bring up mineral ores from the deep sea.
- It will pursue technological innovations for exploration and conservation of deep-sea biodiversity through "bio-prospecting of deep-sea flora and fauna and studies on sustainable utilization of deep-sea bio-resources.
- The mission will seek to explore the prospects of **deriving energy and freshwater from the ocean** through "studies and detailed engineering design for **offshore ocean thermal energy conversion (OTEC)**-powered desalination plants.

# What are other Blue Economy Initiatives?

- India-Norway Task Force on Blue Economy for Sustainable Development:
- Sagarmala project
- O-SMART
- Integrated Coastal Zone Management
- National Fisheries policy

#### **UPSC Civil Services Examination Previous Year Question (PYQ)**

#### **Prelims**

- Q. With reference to 'Indian Ocean Rim Association for Regional Cooperation (IOR-ARC)', consider the following statements: (2015)
  - 1. It was established very recently in response to incidents of piracy and accidents of oil spills.
  - 2. It is an alliance meant for maritime security only.

#### Which of the statements given above is/ are correct?

- (a) 1 only
- **(b)** 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Ans: (d)

#### Exp:

- Indian Ocean Rim Association for Regional Cooperation (IOR-ARC) is a regional cooperation initiative of the Indian Ocean Rim countries which was established in Mauritius in March 1997 with the aim of promoting economic and technical cooperation among its members. Hence, statement 1 is not correct.
- IOR-ARC is the only pan-Indian ocean grouping. It has 23 Member States and 9 Dialogue Partners.
- It aims to create a platform for trade, and socio-economic and cultural cooperation in the Indian Ocean Rim area, which constitutes a population of about two billion people. Hence, statement 2 is not correct.
- The Indian Ocean Rim is rich in strategic and precious minerals, metals and other natural resources, marine resources, and energy, all of which can be sourced from Exclusive Economic Zones (EEZ), continental shelves, and the deep seabed. Therefore, option (d) is the correct answer.

#### Mains

**Q.** Critically evaluate the various resources of the oceans which can be harnessed to meet the resource crisis in the world. **(2014)** 

**Source: PIB** 

# **UN Guidelines for Displaced Children**

For Prelims: International Organisation for Migration (IOM), UN Children's Fund (UNICEF), Climate

Change, Children's Climate Risk Index, Notre Dame Global Adaptation Initiative (ND-GAIN) Index

For Mains: Impact of Climate Change on Migrant Children

## Why in News?

Recently, the <u>United Nations</u>-backed agencies have issued guidelines to provide the **first-ever global policy framework** to protect children displaced due to climate change.

## What Impact is Climate Change having on Children?

- <u>Climate change</u> is intersecting with existing environmental, social, political, economic and demographic conditions that are **contributing to people's decisions to move.**
  - Millions more children could be forced to move in the coming years.
- Nearly 10 million children were displaced following weather-related shocks in 2020 alone.
- Additionally, nearly half of the world's 2.2 billion children, or roughly one billion boys and girls, live in 33 countries at high risk of the impacts of climate change.
- Further, extreme climates like rising sea levels, hurricanes, wildfires, and failing crops are pushing more and more children and families away from their homes.
  - Around the world, migrant children are facing alarming levels of xenophobia, the socioeconomic consequences of the Covid-19 pandemic, and limited access to essential services.
  - Displaced children are at greater risk of abuse, trafficking, and exploitation.
    - They are more likely to lose access to education and healthcare. And they
      are frequently forced into early marriage and child labour.

# What are the UN Guidelines for Displaced Children?

- These guidelines are a joint initiative of the <u>International Organisation for Migration (IOM)</u>, <u>UN Children's Fund (UNICEF)</u>, Georgetown University, and the United Nations University.
  - The guidelines cover both internal as well as cross-border migrations.
- It contains a set of **nine principles** that address the unique vulnerabilities of children who have been uprooted.
  - The principles are based on the <u>Convention on the Rights of the Child</u> and are informed by existing operational guidelines and frameworks.
- These nine principles are as follows:
  - Rights-based approach
  - · Best interests of the child
  - Accountability
  - Awareness and participation in decision-making
  - Family unity
  - Protection, safety, and security
  - Access to education, health care, and social services.
  - Non-discrimination
  - Nationality

## What is the UN Convention on the Rights of the Child?

- It is a treaty adopted by the United Nations General Assembly in 1989.
- It recognises a child as every human being under 18 years old.
- It sets out the civil, political, economic, social and cultural rights of every child, regardless of their race, religion or abilities.
  - It includes rights such as Right to Education, Right to Rest and Leisure, Right to Protection from Mental or Physical Abuse including Rape and Sexual Exploitation.

It is the world's most widely ratified human rights treaty.

## Why was There a Need for These Guidelines?

- There is currently no global policy framework for addressing the needs and rights of children moving in the context of climate change.
  - Where child-related migration policies do exist, they do not consider climate and environmental factors, and where climate change policies exist, they usually overlook children's needs.
- The climate emergency has and will continue to have profound implications for human mobility.
  - Its impact will be most severe with particular segments of our communities such as children.
  - These would serve as a framework for national and local governments, international organizations, and civil society groups to develop policies that protect children's rights.

## What other Assessments are there for Children vis-a-vis Climate Change?

- Children's Climate Risk Index:
  - It ranks countries based on children's exposure to climate and environmental shocks, such as <u>Cyclones</u> and <u>Heatwaves</u>, as well as their vulnerability to those shocks, based on their access to essential services.
  - It is the first comprehensive analysis of climate risk from a child's perspective.
- Notre Dame Global Adaptation Initiative (ND-GAIN) Index:
  - The index shows that children bear the brunt of climate change as it affects their fundamental rights of survival, protection, development and participation.
  - Other potential effects of climate change on children are orphanhood, trafficking, child labour, loss of education and development opportunities, separation from family, homelessness, begging, trauma, emotional disruption, illnesses, etc.

## **Way Forward**

- While the new framework does not include new legal obligations, they distill and leverage key
  principles that have already been affirmed in international law and adopted by governments
  around the world.
- Further, governments around the world need to review their policies in light of the guiding principles and take measures now that will ensure children on the move in the face of climate change are protected today and in the future.
  - Working together, through coordinated action informed by these principles, governments, civil society, and international organizations can better protect the rights and well-being of children on the move.

#### **UPSC Civil Services Exam Previous Year Question (PYQ)**

#### Prelims

Q. With reference to the United Nations Convention on the Rights of the Child, consider the following: (2010)

- 1. The Right to Development
- 2. The Right to Expression

3. The Right to Recreation

#### Which of the above is/are the Rights of the child?

(a) 1 only

**(b)** 1 and 3 only

(c) 2 and 3 only

(d) 1, 2 and 3

Ans: (d)

#### Exp:

- The United Nations (UN) took its first step towards declaring the importance of child rights by establishing the United Nations International Children's Emergency Fund (UNICEF) in 1946. In 1948, the UN General Assembly adopted the Universal Declaration of Human Rights, making it the first UN document to recognise children's need for protection.
- The first UN document specially focused on child rights was the Declaration on the Rights of the Child, but instead of being a legally binding document it was more like a moral guide of conduct for governments. It was not until 1989 that the global community adopted the United Nations Convention on the Rights of the Child, making it the first international legally binding document concerning child rights.
- The convention, which came into force on the 2nd September 1990, consists of 54 articles covering various categories of child rights including right to life, right to development, right to engage in play and recreational activities, right to protection, right to participation, expression, etc. Hence, 1, 2 and 3 are correct. Therefore, option (d) is the correct answer.

**Sourec: DTE** 

## **Coffee Promotion Bill**

For Prelims: Coffee Board of India, Coffee production in India

For Mains: Government Policies and Interventions

#### Why in News?

Recently, the government is going to introduce a coffee promotion bill to modernize the functioning of the Coffee Board, promote exports, and support the development of the domestic market.

#### What is the New Bill About?

- About:
  - It aims to modernize the functioning of the Coffee Board of India.
  - It would address several functional areas of the Coffee Board, such as support for production, research, extension, and quality improvement, promotion of coffee, and skill development of growers.
  - Many such activities were originally not included in the mandate of the Coffee Board but

now need to be incorporated into its functions and powers.

#### Significance:

- With the expansion of the coffee industry, there would be the creation of jobs and chances for business entrepreneurship in all sectors of the coffee value chain, from production to consumption.
- Furthermore, consumers will receive high-quality coffee comparable to those of other countries.
- It will also protect the interests of the labor in plantations, processing units, and coffee communities.
- It will promote ease of doing business by simplifying documentation and procedures, including replacing the existing five-year validity of Registration cum Membership Certificate (RCMC) with a one-time exporter registration and bringing in a one-time registration of curing units.
  - There will be a time-bound procedure in the Bill for issuing the Registration Certificate.

## What was the need to replace the old law?

- The earlier act was almost 80 years old and was obsolete in today's time.
  - Its provisions were relevant to that time.
- Also, currently, many rules and regulations, especially those pertaining to the marketing of coffee, are redundant.
- Over the past 10 years, there has been a paradigm shift in the way coffee is grown, marketed, and consumed.

#### What is Present status of Coffee Production in India?

- India is among the top 10 coffee-producing countries, with about 3% of the global output in 2020.
- India produces two types of coffee: Arabica and Robusta.
  - Arabica has higher market value than Robusta coffee due to its mild aromatic flavor.
- Climatic conditions:
  - Coffee plants require hot and humid climate with temperature varying between 15°C and 28 °C and rainfall from 150 to 250 cm.
    - It does not tolerate frost, snowfall, high temperatures above 30°C and strong sunshine and is generally grown under shady trees.
  - Coffee is largely produced in the southern part of India.
    - Karnataka is the largest producer accounting for about 70% of the total coffee production in India.
- Producer States:
  - Coffee is mainly produced in Karnataka, Kerala, Tamil Nadu, Andhra Pradesh and Odisha.
- Exports:
  - According to The <u>Food and Agriculture Organization (FAO)</u> statistics, India is the eighth largest exporter of coffee by volume.

#### What is the Coffee Board of India?

- The Coffee Board is a **statutory organization** constituted under Section (4) of the Coffee Act, 1942 and functions under the administrative control of the Ministry of Commerce and Industry, Government of India. **The Board comprises 33 Members including the Chairperson.**
- The Board is mainly focusing its activities in the areas of research, extension, development, market intelligence, external & internal promotion, and welfare measures.
- It is headquartered in Bengaluru.
- The Board has a Central Coffee Research Institute at Balehonnur (Karnataka).

## **UPSC Civil Services Examination Previous Year Question (PYQ)**

# Q. Match List-I with List-II and select the correct answer using the code given below the Lists: (2008)

List-I (Board)	List-II (Headquarters)
A. Coffee Board	1. Bengaluru
B. Rubber Board	2. Guntur
C. Tea Board	3. Kottayam
D. Tobacco Board	4. Kolkata

Code: A B C D

(a) 2 4 3 1

**(b)** 1 3 4 2

(c) 2 3 4 1

(d) 1432

Ans: (b)

#### Exp:

- **Coffee Board:** It was established through the Coffee Act VII, 1942. The Coffee Board, under the administrative control of Ministry of Commerce and Industry, is an organisation that promotes coffee production in India. It is headquartered in **Bengaluru.**
- **Rubber Board:** It was constituted under the Rubber Act, 1947 and Rubber Rules 1955. Rubber Board is a statutory body under the Ministry of Commerce and Industry for the overall development of the rubber industry in the country. Head Office of the Board is located at **Kottayam in the State of Kerala.**
- **Tea Board**: It was established by the Tea Act in 1953. The Tea Board of India is a State agency of the Gol established to promote the cultivation, processing, and domestic trade as well as export of tea from India. It is headquartered in **Kolkata**.
- **Tobacco Board**: It was constituted as a statutory body on 1st January, 1976 under Section (4) of the Tobacco Board Act, 1975. The Board is headed by a chairman with its headquarters **at Guntur, Andhra Pradesh.** It is responsible for the development of the tobacco industry.
- Therefore, option (b) is the correct answer.

Source: BS

# **Social Security for Unorganised Workers**

For Prelims: e-Shram Portal, Unorganised Sector, Informal economy

For Mains: State of Informal Economy in India and Related Initiatives

Why in News?

The Ministry of Labour & Employment has informed <u>Rajya Sabha</u> that **more than 28 crore unorganised workers** have been registered on <u>e-Shram Portal</u> and the government is formulating Social Security Schemes for unorganised Workers.

 It is also reported that, India is negotiating Social Security Agreements (SSAs) with the United States and United Kingdom to avoid duplication of Social Security Schemes.

#### What is SSA?

- SSA is a bilateral agreement between India and a foreign country designed to protect the interests of cross border workers.
- The agreement **provides for avoidance of 'double coverage'** and ensures equality of treatment to workers of both countries from a social security perspective.
- Under detachment or elimination of dual contribution, employees moving on employment to any SSA country are exempt from making social security contributions in the host country for a specified period (specific to each SSA), provided they continue to make social security contributions in their home countries.
- India has SSAs with Belgium, Germany, Switzerland, Grand Duchy of Luxembourg, France, Denmark, Korea, the Netherlands, Hungary, Finland, Sweden, Czech Republic, Norway, Austria, Canada, Australia, Japan and Portugal.

## What is a Social Security?

- About:
  - According to the <u>International Labour Organisation (ILO)</u>, Social Security is a comprehensive approach designed to prevent deprivation, give assurance to the individual of a basic minimum income and to protect the <u>individual</u> from any uncertainties.
- Elements:
  - Right to a Standard of Living adequate for the health and well-being, including food, clothing, housing and medical care and necessary social services.
  - Right to Income Security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond any person's control.

## What is the Need for Social Security Measures?

- Informal workers in rural and urban areas have been hit the most due to the <u>Covid-19</u>
   <u>Pandemic</u>, because of the seasonality of their employment and lack of formal employee-employer relationship.
  - As per the <u>Periodic Labour Force Survey</u> (PLFS), 90% of workers are in the informal sector, which is **419 million of the 465 million workers**.
- Moreover, the Covid-19 crisis in India has come in the backdrop of pre-existing high and rising unemployment.
- The consequential effects on loss of jobs, rising unemployment, indebtedness, nutrition, health and education of unorganised workers and their family members have the potential to cast a long shadow and irreparable damage.
- India has been witnessing a steady informalisation of the formal workforce in manufacturing and services, underlined by the growth of the gig economy. While this informalisation has offered additional income-generating opportunities, the informality in the arrangement has led to employment increasingly characterised by uncertainty.
- Less than half of the informal sector workers have access to any form of risk protection such as life insurance, health insurance and pensions.

#### What is Current State of Informal workers in India?

Over 94% of 27.69 crore informal sector workers registered on the e-Shram portal have a

monthly income of Rs 10,000 or below and over 74% of the enrolled workforce belongs to **Scheduled Castes (SC)**, Scheduled Tribes (ST) and **Other Backward Classes (OBC)**.

- The proportion of the General Category workers is 25.56%.
- The data showed that **94.11% of the registered informal workers have a monthly income of Rs 10,000 or below,** while 4.36% have a monthly income between Rs 10,001 and Rs 15,000.

## What are the Related Initiatives for Unorganised Workers?

- Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY):
  - It is a one-year life insurance scheme renewable from year to year offering coverage for death due to any reason.
- Pradhan Mantri Suraksha Bima Yojana (PMSBY):
  - It is a one-year accidental insurance scheme renewable from year to year offering coverage for death or disability due to accident.
- Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY):
  - It is the **world's largest health insurance/ assurance** scheme fully financed by the government.
- Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM):
  - It is a <u>Central Sector Scheme</u> administered by the Ministry of Labour and Employment and implemented through Life Insurance Corporation of India and Community Service Centers (CSCs).
- Atal Pension Yojana:
  - The scheme was launched in May, 2015, with the objective of creating a universal social security system for all Indians, especially the poor, the under-privileged and the workers in the unorganised sector.
- National Social Assistance Programme (NSAP):
  - The Ministry of Rural Development has proposed that the monthly pensions of the elderly poor, disabled and widows should be increased from the current Rs 200 to Rs800 under NSAP.
- Garib Kalyan Rojgar Abhiyaan:
  - The scheme empowers and provide livelihood opportunities to the returnee migrant workers and rural citizens who have returned to their home states due to the <u>Covid-19</u> induced <u>lockdown</u>.

## **Way Forward**

- While the additional benefits offered by these schemes to unorganised sector workers would help, there is a need to formalise and standardise minimum floor-level provisions for unorganised workers akin to those made for formal sector workers in the Code on Social Security.
- The Labour Ministry should take up the issue of timely completion of the PLFS with the Statistics and Programme Implementation Ministry.
- A comprehensive plan and roadmap are required to address the deteriorating condition of employment much aggravated by the pandemic, and widening disparities in the job market in the organised sector.
- There is a need to develop a national database of unorganised workers.
- Further, formalising the sector, increasing its productivity, strengthening existing livelihoods, creating new opportunities and fortifying social security measures are major thrust areas to mitigate the impact of Covid-19.

**Source: TH** 

# **Foreign Direct Investment**

For Prelims: FDI, FPI, Government Initiatives

For Mains: Significance of FDI for Indian Economy, Different Routes and components of FDI,

Government's Initiatives

## Why in News?

India received the highest annual FDI inflows of USD 84,835 million in FY 21-22, overtaking last year's FDI by USD 2.87 billion.

- In 2021, FDI inflows increased from USD 74,391 million in FY 19-20 to USD 81,973 million in FY
- UNCTAD World Investment Report (WIR) 2022 has ranked India at 7<sup>th</sup> rank among the top 20 host economies for 2021, in terms of FDI.

# Who are the Top Recipients?

- India's Statistics:
  - India received the highest annual FDI inflows of USD 84,835 million in FY 21-22, overtaking last year's FDI by USD 2.87 billion.
    - In 2021, FDI inflows increased from USD 74,391 million in FY 19-20 to USD The Vision 81,973 million in FY 20-21.
  - Top 5 FDI Sourcing Nation:
    - Singapore: 27.01%
    - USA: 17.94%
    - Mauritius: 15.98%
    - Netherland: 7.86%
    - Switzerland: 7.31%
- Top Sectors:
  - Computer Software & Hardware: 24.60%
  - Services Sector (Fin., Banking, Insurance, Non Fin/Business, Outsourcing, R&D, Courier, Tech. Testing and Analysis, Other): 12.13%
  - Automobile Industry: 11.89%
  - **Trading:** 7.72%
  - Construction (Infrastructure) Activities: 5.52%
- Top Destinations:
  - Karnataka: 37.55%
  - Maharashtra: 26.26%
  - Delhi: 13.93%
  - **Tamil Nadu:** 5.10%
  - Harvana: 4.76%
- FDI Equity inflow in Manufacturing Sectors have increased by 76% in FY 2021-22 (USD 21.34) billion) compared to previous FY 2020-21 (USD 12.09 billion).

## What is Foreign Direct Investment?

- About:
  - · A Foreign Direct Investment (FDI) is an investment made by a firm or individual in one country into business interests located in another country.
    - FDI lets an investor purchase a direct business interest in a foreign country.
  - Investors can make FDI in a number of ways.
    - Some common ones include establishing a subsidiary in another country, acquiring or merging with an existing foreign company, or starting a joint venture partnership with a foreign company.
  - Apart from being a critical driver of economic growth, FDI has been a major non-debt

#### financial resource for the economic development of India.

- It is different from <u>Foreign Portfolio Investment</u> where the foreign entity merely buys stocks and bonds of a company.
  - FPI does not provide the investor with control over the business.

#### Components:

- Equity capital:
  - It is the foreign direct investor's purchase of shares of an enterprise in a country other than its own.
- Reinvested earnings:
  - It comprises the **direct investors' share of earnings** not distributed as dividends by affiliates, or earnings not remitted to the direct investor.
    - Such retained profits by affiliates are reinvested.
- Intra-company loans:
  - These refer to **short- or long-term borrowing** and **lending of funds** between direct investors (or enterprises) and affiliate enterprises.
- Routes of FDI:
  - Automatic Route:
    - In this, the foreign entity does not require the prior approval of the government or the RBI (Reserve Bank of India).
    - In India FDI up to 100% is allowed in non-critical sectors through the automatic route, not requiring security clearance from the Ministry of Home Affairs (MHA).
      - Prior government approval or security clearance from MHA is required for investments in sensitive sectors such as defence, media, telecommunication, satellites, private security agencies, civil aviation and mining, besides any investment from Pakistan and Bangladesh.
  - Government Route:
    - In this, the foreign entity has to take the approval of the government.
      - The Foreign Investment Facilitation Portal (FIFP) facilitates the single window clearance of applications which are through approval route. It is administered by the <u>Department for Promotion of Industry and</u> <u>Internal Trade (DPIIT)</u>, Ministry of Commerce and Industry.

#### What has the Government done to boost FDI?

- The Government of India has taken many initiatives in recent years such as relaxing <u>FDI norms</u> across sectors such as defence, PSU oil refineries, telecom, power exchanges, and stock exchanges, among others.
- <u>'Make in India</u>' and <u>'Atmanirbhar Bharat'</u> campaigns coupled with strengthening of <u>India's</u> **footing in global supply chains** have given momentum to FDI inflows over the past few years.
- Launch of Schemes attracting investments, such as, <u>National technical Textile Mission</u>,
   <u>Production Linked Incentive Scheme</u>, <u>Pradhan Mantri Kisan SAMPADA Yojana</u>, etc.
- The first wave of the <u>Covid-19 pandemic</u> prompted around 1,000 companies to shift their base out of China, with nearly 300 of them being in the areas of medical and electronic devices, mobiles and textiles.
  - For India, **companies like Lava International** with over 600 employees clarified its intention to shift its base to India from China.
- Higher FDI inflows have been possible due to the liberal and attractive policy regime for the investors, a good business climate and reduced regulatory framework.

#### How can India Retain this Growth?

- Government policies/decisions are of crucial importance in creating a conducive environment for global investors. The disruptions induced by the pandemic have given opportunities for India to expand its global footprints.
  - The government is striving to strengthen the FDI environment through an array of policy initiatives and reforms at all levels.
  - This also has to be complemented by a sound trade policy to boost exports further, encourage inclusive development, and incentivise R&D (research & development) to

make our industry globally competitive.

- **FDIs have more potential** to facilitate the growth of the Indian economy than Foreign Portfolio Investment (FPI).
  - It should be ensured that India remains an attractive, safe, predictable destination for serious, long term investors.
    - A level playing field is necessary if we want continued foreign investments. Sneaking loyalty towards local players should be avoided.

## **UPSC Civil Services Examination, Previous Year Questions (PYQs)**

### Q. Consider the following: (2021)

- 1. Foreign currency convertible bonds
- 2. Foreign institutional investment with certain conditions
- 3. Global depository receipts
- 4. Non-resident external deposits

#### Which of the above can be included in Foreign Direct Investments?

- (a) 1, 2 and 3
- **(b)** 3 only
- (c) 2 and 4
- (d) 1 and 4

### Ans: (a)

#### **Explanation:**

- Foreign Investment means any investment made by a person resident outside India on a repatriable basis in capital instruments of an Indian company or to the capital of an LLP.
  - Foreign Direct Investment (FDI) is the investment through capital instruments by a person resident outside India (a) in an unlisted Indian company; or (b) in 10% or more of the post issue paid-up equity capital on a fully diluted basis of a listed Indian company.
  - Foreign Portfolio Investment is any investment made by a person resident outside India in capital instruments where such investment is (a) less than 10% of the post issue paid-up equity capital on a fully diluted basis of a listed Indian company or (b) less than 10% of the paid-up value of each series of capital instruments of a listed Indian company.
- Foreign investment is recognized as FDI only if the investment is made in equity shares, fully and mandatorily convertible preference shares and fully and mandatorily convertible debentures only.
   FDI policy does not permit issuance of any optionally convertible security.
- Foreign Currency Convertible Bonds (FCCBs) are foreign currency convertible Bonds invested in Indian company. Since these bonds are convertible in to equity shares over a period of time as provided in the instrument, therefore they are covered under FDI policy and inward remittances received by the Indian company vide issuance of FCCBs are treated as FDI and counted towards FDI. Hence, 1 is correct.
- Foreign Institutional Investor (FII) is not FDI in general as FIIs can invest up to a maximum of 10 per cent of the total paid-up capital, however, if FII invest in convertible debenture then it is counted as FDI subject to certain limitations. Hence, 2 is correct.
- Indian companies can raise foreign currency resources abroad through the issue of American Depository Receipt (ADR)/Global Depository Receipts (GDRs) in accordance with the Scheme for issue of Foreign Currency Convertible Bonds and Ordinary Shares (through Depository Receipt Mechanism) Scheme, 1993 and guidelines issued by the Government of India thereunder from time to time. Therefore, bonds cannot be FDI but Convertible Bond/Debenture could be converted to Equity and included under FDI. Hence, 3 is correct.
  - DRs are basically foreign investment in the form of equity shares issued outside India by a Depository Bank, on behalf of an Indian company which is covered under the FDI policy.
- Non-resident external deposits or are not treated as FDI as banks can route these deposit for loans. NRIs can invest in shares on recognized stock exchanges under portfolio investment route.
   The investment can be repatriable or non-repatriable, but the maximum limit of investment is 10%

- of paid-up capital of the relevant company. Hence, 4 is not correct.
- Therefore, option (a) is the correct answer.

**Source: PIB** 

# Swachh Sagar, Surakshit Sagar campaign

## Why in News?

Recently, the Ministry of Earth Sciences has launched a Coastal Clean Up Drive under Swachh Sagar Surakshit Sagar Campaign to clean 75 beaches across the country in 75 days.

## What is the Swachh Sagar, Surakshit Sagar Campaign?

- About:
  - It is the first-of-its-kind and **longest running coastal cleanup campaign** in the world with the highest number of people participating in it.
  - The Campaign will culminate on "International Coastal Clean-up Day" (17<sup>th</sup> September 2022).
    - The day aims to increase public awareness about the accumulation and negative impacts of litter in oceans, on coastlines and on beaches.
  - Globally, "International Coastal Clean Up Day" is celebrated on the third Saturday of September, every year.
  - Through this campaign, a mass behavioural change among the masses is intended by raising awareness about how plastic usage is destroying the marine life.
  - A mobile app **"Eco Mitram"** has been launched to spread awareness about the campaign and also for the common people for voluntary registration for the beach cleaning activity.
- Objectives:
  - Running a cleanliness campaign along India's entire coastline.
  - To reduce marine litter.
  - Minimising the use of plastics.
  - Encouraging segregation of waste at source and waste management.

# What is the Significance of a Clean Ocean?

- The ocean is a vital source of nourishment, especially to people in the world's poorest nations.
- Many depend on fish for their primary source of protein; fisheries and aquaculture support the livelihoods of about 540 million people (8% of the world's population) directly or indirectly.
- Overfishing, loss of biodiversity and the possible extinction of species put a stress on these limited resources. This could lead to famine, increased poverty and conflicts, including war.
- Learning to manage the ocean sustainably is the only path to global prosperity and peace.

#### What are the Related Initiatives?

- Ban on Single-Use Plastics
- Extended Producer Responsibility (EPR) Policy.
- Environment (Protection) Act, 1986
- World Oceans Day
- GloLitter Partnerships Project

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