

**DAILY
CURRENT
AFFAIRS
ANALYSIS**



LAKSHYA ACADEMY®

27 JULY 2023

1 - Rashtra Aarogya Nidhi:

GS II

Government Policies and Interventions

- **Context:**

- The Lok Sabha was made aware of Rashtra Aarogya Nidhi by the Union Minister of State for Health and Family Welfare.

- **Regarding the plan:**

- Rashtriya Arogya Nidhi's (RAN) overarching programme is a central sector programme.
- It offers one-time financial support to low-income patients with life-threatening illnesses who are below the State or UT-based poverty line.
- Any of the government's super-specialty hospitals or institutions can provide the treatment.

- **There are three parts to the RAN's umbrella scheme:**

- **RAN - Rashtriya Arogya Nidhi:**

- financial support for the treatment of disorders of the heart, kidney, liver, and other organs that are life-threatening at government hospitals and institutions with superspecialty facilities;
- The maximum amount of financial aid is Rs. 15 lakhs.

- **Cancer Patient Fund of the Health Minister (HMCPF):**

- Financial support for cancer therapy at state cancer institutes, tertiary care cancer centres, and regional cancer centres
- The maximum amount of financial aid is Rs. 15 lakhs.
- Financial support for underprivileged people with uncommon disorders
- for treatment at government hospitals or institutions with superspecialty facilities for certain uncommon disorders;
- The maximum amount of financial aid is Rs. 20 lakhs.

2 - Schemes For Empowerment Of Rural Women:

GS II

Government Policies and Interventions

- **Context:**
- The Lok Sabha was informed by the Union Minister for Women & Child Development on the different programmes available to rural women.
- **Regarding the schemes:**
- **Reservation in institutions under the Panchayati Raj:**
- A third of the seats in the Panchayati Raj Institutions (PRIs) are now reserved for women thanks to the 73rd amendment to the Constitution.
- More than 14.50 lakh elected women representatives (EWRs) currently serve in PRIs, accounting for over 46% of all elected officials.
- **Mission for Rural Livelihoods:**
- Around 83.5 lakh women's self-help organisations are connected to nearly 9.00 crore women through the National Rural Livelihoods Mission (NRLM).
- They are receiving assistance from the government, including through loans without collateral.
- **MGNREGA:**
- According to the Mahatma Gandhi National Rural Employment Guarantee Act of 2005 (MGNREGA), women must receive at least one-third of the jobs created by the MGNREGA.
- **E-NAM:**
- The National Agriculture Market, often known as e-NAM, is an online trading platform for agricultural commodities that aids women in overcoming or making up for the obstacles they encounter while trying to reach markets.
- **Corporation for National Cooperative Development**

- The National Cooperative Development Corporation (NCDC) is helping to advance women's cooperatives in a big way.
- **Training and development of skills:**
- The government is training female workers through a network of Women Industrial Training Institutes, National Vocational Training Institutes, and Regional Vocational Training Institutes in order to increase their employability.
- **Anganwadi programme:**
- Pregnant women and nursing mothers are eligible for services under the Anganwadi Services under Mission Poshan 2.0, including the Supplementary Nutrition Programme (SNP).
- **BMMVY: Pradhan Mantri Matru Vandana Yojana:**
- **The government has put into place the Pradhan Mantri Matru Vandana Yojana (PMMVY), which aims to:**
 - encourage acceptable behaviour, treatment, and use of institutional resources throughout pregnancy, delivery, and breastfeeding
 - giving pregnant and nursing mums monetary incentives through Direct Benefit Transfer (DBT) mechanism.
- **Clean India Mission:**
- Many rural women's lives have been improved as a result of the construction of nearly 11 billion toilets as part of the "Swachhh Bharat Mission."
- **PMGDISHA:**
- A member of each eligible family is targeted by the Prime Minister's Rural Digital Literacy Campaign (Pradhan Mantri Gramin Digital Saksharta Abhiyan, or PMGDISHA), which aims to digitally literate 6 crore people.
- Women make up more than 53% of PMGDISHA beneficiaries.
- **Project Shakti:**
- As an umbrella programme for the safety, security, and empowerment of women, the Ministry of Women and Child Development runs "Mission Shakti," an integrated women's empowerment programme.

- **The 'Mission Shakti' has two sub-schemes, namely:**
- "Sambal" for women's protection and security
- "Samarthya" for women's emancipation.
- A new element, the Hub for Empowerment of Women (HEW), has been added to the "Samarthya" sub-scheme with the intention of facilitating the inter-sectoral convergence of schemes and programmes intended for women at the Central, State/UT, and District levels.

Source → The Hindu

3 - Artificial Intelligence:

GS III

Science and Technology

- **Context:**
- Google's DeepMind recently made available the structures of 200 million proteins, or virtually all of them. The 'solution' to the protein-folding challenge is hailed as the most significant AI accomplishment to date.
- **Key information:**
- The 3D architectures of proteins, which are made up of a linear chain of amino acids, govern how they work.
- It takes time to determine the structure.
- No other solution came close to matching DeepMind's AlphaFold's accuracy in predicting the structures of around 100 proteins at the atomic level.
- Drugs for rare disorders, which are of little financial interest to pharmaceutical corporations, can now be developed more quickly thanks to AlphaFold.
- **With regard to artificial intelligence:**
- Artificial intelligence (AI) is the capacity of a machine to carry out a function that previously needed human intelligence.
- Some characteristics of human intelligence, such as learning, problem-solving, perception, and even a limited range of creativity and social intelligence, may be displayed by modern AI systems.

- **Various forms of AI:**

- **Limited AI:**

- Voice assistants like Siri, Alexa, and Google Assistant depend on artificial narrow intelligence (ANI).
- Since ANI lacks general intelligence, it is frequently referred to as weak AI.

- **Examples of the effectiveness of limited AI include:**

- speaking machines,
- systems for recognising images,
- technologies that can answer straightforward customer service enquiries, and
- tools for identifying improper web content.
- An example of an artificially intelligent (ANI) system is ChatGPT, which is programmed to provide text responses to commands.

- **DeepMind:**

- DeepMind, a subsidiary of Google, is a leader in artificial intelligence (AI) and is working towards the development of artificial general intelligence (AGI).
- DeepMind has built programmes that can identify eye problems as effectively as the best doctors in the world. DeepMind has also created a protein-folding prediction system that can anticipate the intricate 3D forms of proteins.

- **Advantages:**

- **Lower Human Error Rate:**

- With artificial intelligence, choices are made using a certain set of algorithms and information that has already been obtained.

- **Example:**

- AI has significantly reduced human inaccuracy in weather forecasting.
- Risk-takers as opposed to Humans:
- By creating an AI robot that can do unsafe tasks, we can get beyond many dangerous human restrictions.
- Any form of natural or man-made calamity can use it successfully.
- In circumstances where human intervention may be dangerous, AI robots can be deployed.

- **Always accessible:**

- Without breaks, a typical person will work for four to six hours every day.
- Unlike humans, machines don't get tired working nonstop 24 hours a day and 7 days a week because to artificial intelligence (AI).

- **Example:**

- Many of the questions and problems that educational institutions and helplines receive can be resolved with AI.

- **Supporting Repeated Tasks:**

- We may use artificial intelligence to efficiently automate some menial jobs and even to remove "boring" tasks from the human workforce, allowing people to focus on becoming more creative.

- **Example:**

- In banks, numerous document checks are frequently required in order to obtain a loan, which is a tedious duty for the bank's owner.

- **Digital Support:**

- Many websites utilise digital assistants to deliver user-requested content.

- **Quicker judgements:**

- We can make computers make decisions and take action faster than a person by combining AI with other technologies.
- Humans consider numerous elements while making decisions, both emotionally and practically, whereas AI-powered machines follow their programming and produce results more quickly.

- **Everyday Applications:**

- Everyday programmes like Apple's Siri, Windows' Cortana, and Google's OK Google are regularly utilised in our daily activities whether it be for location-based searches, selfies, phone calls, or email replies.

- **Example:**

- Recently, utilising cutting-edge AI-based technologies, doctors can predict breast cancer in a woman at an early stage.

- **Moving forward:**

- The divide between the haves and the have-nots is drastically widening, while infrastructure supporting modern science is becoming more complex.
- It seems obvious that the spread of AI could concentrate wealth and generate inequality.
- All levels of government must immediately evaluate how AI will affect society.
- To guide institutions, business, and society, they must create advisory committees and develop policy guidelines for AI and data governance.
- Similar initiatives must be made in every institution.
- Responsible AI development requires an interdisciplinary setting.

Source → The Hindu

4 - Marine heat waves:

GS I

Geography related issues



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- **Context:**

- The worldwide sea surface temperature averaged 21.1 degrees Celsius on a daily basis in April, breaking the previous mark set in 2016 of 21 degrees Celsius.

- **Key information:**

- Marine heat waves (MHWs) have been causing trouble all around the world ever since ocean temperatures have stayed at record-high levels.
- At the moment, MHWs have engulfed the north-east Pacific, the north-east Atlantic, the tropical North Atlantic, the Mediterranean, and the southern hemisphere's southern Indian and Pacific oceans.

- **What are heat waves in the ocean?**

- An severe weather occurrence is a heat wave at sea.
- It happens when the sea surface temperature in a given area rises by three or four degrees Celsius for at least five days.

- The duration of MHWs might range from weeks to years.
- **Marine heat waves' effects on marine life**
- **Fish deaths:**
 - Even though a rise in average temperatures of 3 or 4 degrees Celsius may not seem like much to people, it can have disastrous effects on marine life.
 - For instance, "devastating" fish kills were brought on by MHWs throughout the Western Australian coast in the summers of 2010 and 2011.
- **Forest of kelp is destroyed:**
 - According to a another study, the same MHWs damaged kelp forests and significantly changed the coastal environment.
 - Kelps typically grow in cooler seas, giving many marine species a home and food source.
 - coral whitening
 - A significant coral bleaching event occurred in 2005 as a result of warm ocean temperatures in the tropical Atlantic and Caribbean.
 - According to a 2010 research, more than 80% of the corals assessed were bleached and more than 40% of the corals overall had died.
 - The temperature of the water in which corals reside affects them greatly.
 - They expel the zooxanthellae algae that reside in their tissues when the water temperature rises too high, which turns them completely white.
 - The term for this is coral bleaching.
 - Coral that bleaches is not already dead.
 - Corals may endure a bleaching episode, although they are more vulnerable to stress and death.
 - Coral bleaching has negative effects on coral reproduction and increases their susceptibility to deadly illnesses.
 - Numerous marine organisms rely on coral reefs for their survival, and any harm to corals could put those animals' lives in danger.
 - the expansion of invasive alien species
 - Additionally, MHWs encourage the spread of alien species that can harm the marine food webs.
 - Species behaviour has changed:
 - They compel organisms to alter their behaviour in a way that increases the danger of harm to wildlife.
 - According to a research by the International Union for Conservation of Nature (IUCN), MHWs have been connected to whale entanglement in fishing gear.

- **Human health effects of marine heat waves:**
- **Storms with high wind speeds:**
 - Storms like hurricanes and tropical cyclones may intensify due to higher ocean temperatures linked to MHWs.
 - The rate of evaporation increases as the temperature rises, as does the amount of heat that is transferred from the oceans to the atmosphere.
 - Storms pick up more heat and water vapour as they pass warm oceans.
 - When storms hit the land, this causes stronger winds, more rain, and more flooding, which causes greater human suffering.
- **Loss of food and means of support:**
 - Reefs provide food, money, and safety for half a billion people.
 - Therefore, humans who depend on these reefs suffer the most when MHWs destroy them.

Source → The Hindu

5 - Global Report on the Food Crises 2023:

GS II

International Issues

- **Context:**
 - Recent publication of the Global Report on the Food Crises (GRFC) 2023.
- **Key information:**
 - In 2022, it is predicted that between 691 million and 783 million people would be hungry worldwide.
 - Food insecurity did not increase throughout the two epidemic years, but the data for 2022 reveals levels that are significantly higher than in the year before the pandemic.
- **Who issues the GRFC?**
 - The Global Network against Food Crises (GRFC) is supported by the Food Security Information Network, which creates the GRFC.

- To estimate the severity of acute food insecurity in various nations, 16 partners are involved.
- **How does food security work?**
- Defining food security is taken from the 1996 World Food Summit:
- a time when everyone, at all times, has physical and financial access to enough, safe, and nutritious food that satisfies their food preferences and dietary needs for an active, healthy life.
- The Food Insecurity Experience Scale (FIES) is used to determine the prevalence of moderate or severe food insecurity in the community.
- **Key conclusions:**
- The first statement in the Global Report is that, while hunger levels are still significantly higher than they were prior to the COVID pandemic, they are no longer rising at an alarming rate globally.
- According to the report, the globe is far from attaining Sustainable Development Goal 2 - ending hunger.
- It establishes the global contexts before and during the evaluation year, giving particular emphasis to the phenomena of urbanization's growth and its effects on food security.
- According to new estimates, there was no improvement in the global situation of food insecurity for 2022.
- The prevalence of moderate or severe food insecurity worldwide remained steady for the second year in a row after seeing a significant rise from 2019 to 2020, however it remained significantly higher than before the COVID-19 epidemic.
- An estimated 2.4 billion people won't have access to enough food in 2022.
- 391 million more people than in 2019 make up this population.
- From 2021 to 2022, the prevalence of undernourishment—a metric of global hunger—remained largely stable, but it is once more much higher than pre-COVID-19 pandemic levels.
- In 2022, 9.2% of the world's population will be impacted, up from 7.9% in 2019.
- From 204.2 million stunts in 2000 to 148.1 million in 2022, stunting has steadily decreased.
- In children under the age of five, stunting is the condition of being too short for one's age.
- From 54.1 million in 2000 to 45 million in 2022, fewer children are wasting away.
- It results from inadequate nutrient consumption or absorption.
- The study found a non-significant rise in the percentage of children who are overweight or obese, from 5.3% (33 million) in 2000 to 5.6% (37 million) in 2022.
- According to the updated data included in this year's report, roughly 3.2 billion people globally could not afford to eat healthily in 2020, with 2021 seeing a tiny improvement.
- Between 2019 and 2021, the cost of a balanced diet increased internationally by 6.7%.
- Additionally, it predicts that by 2030, there will be nearly 600 million individuals who are chronically malnourished.

- **What main factors contribute to food insecurity?**

- Lockdowns are hampering the economy.
- Economic turbulence.
- Additional pandemic-related disruptions in 2020 that caused many people to lose their jobs and experience lower salaries.
- War in Ukraine.
- policy of the government that might not always be favourable; and
- Urbanisation is spreading, causing changes in the agri food systems.

- **Moving forward:**

- The importance of identifying those who are susceptible
- The study provides evidence to support decision-making and successful action through the appropriate targeting and design of policies and programmes, helping to identify vulnerable demographic groups.
- In order to attain the Sustainable Development Goals, good nutrition must be prioritised in public policy and supported by both civil society and the commercial sector.
- Supporting healthier food establishments is one of its suggestions for facilitating access to a healthy diet.
- To encourage stores to sell more fresh and less processed foods, policy incentives are required.
- Street food, which is consumed daily by an estimated 2.5 billion people globally, is still another important factor.
- To increase the nutritional safety and quality of street food, the research urges closing numerous infrastructure and regulatory deficiencies.
- The GRFC also recommends developing rural infrastructure, such as high-quality feeder and rural roads that link isolated farms and businesses to larger road networks.
- Storage, cold storage, dependable power, access to digital tools, and water supply are possible further public investments to enhance connections between (mostly small) farms and small and medium enterprises.
- The importance of local governments as key players in leveraging multilevel and multi stakeholder processes that have proven successful in enacting crucial policies to make healthy meals accessible and affordable for everyone is stressed numerous times in this passage.

Source → The Hindu