

DAILY CURRENT AFFAIRS



24th February, 2024



S.NO. TOPIC

1. WHY IS FARMING NOT REMUNERATIVE IN INDIA?

2. PRELIMS POINTERS

WHY IS FARMING NOT REMUNERATIVE IN INDIA?

SOURCE: THE INDIAN EXPESS

TAG: GS Paper III- Agriculture and issues related to it, Agricultural Technology.

PREVIOUS YEAR QUESTIONS

Mains (2013)

Q. Establish relationships between land reforms, agricultural productivity and elimination of poverty in the Indian economy. Discuss the difficulties in designing and implementation of agriculture – friendly land reforms in India.

(150 words)

INTRODUCTION:

- In rural India, the plight of farmers remains a pressing concern, underscored by stark realities. With over 70% of the population engaged in agriculture, the sector's contribution to the nation's GDP has dwindled from over 50% at independence to less than 18% today.
- This decline in economic significance mirrors the challenges faced by farmers, including shrinking land holdings, rising debt burdens, and unfavourable terms of trade. As India grapples with the complexities of agrarian distress, addressing the plight of its farmers emerges as a critical imperative for sustainable development.

STATE OF FARMING IN INDIA:

- Economic Disproportion:
 - Despite its large workforce, agriculture now contributes less than 18% to India's GDP, highlighting its disproportionate economic burden.
- **❖** Agrarian Crisis:
 - India faces a deep-rooted crisis with declining farm incomes, rising indebtedness, and shrinking land holdings, particularly affecting small and marginal farmers.
- Imbalanced Trade Terms:
 - Farmers struggle with rising input costs and stagnant or declining prices for their produce, leading to reduced purchasing power and increased debt.
- **Regional Disparities:**
 - Variations in productivity and income exist among states due to factors like land fertility, irrigation access, market reach, and government support.

REASONS FOR FARMING BEING UNREMUNERATIVE IN INDIA:

- Input Costs and Price Volatility:
 - Farmers often face challenges related to input costs such as **seeds**, **fertilizers**, **pesticides**, **and irrigation**.
 - Fluctuations in input costs combined with price volatility for agricultural commodities make it difficult for farmers to predict and manage their expenses effectively.



The NSSO's Situation Assessment Survey of Agricultural Households reported that 50% of all farm households in India were indebted as of 2019.

Lack of Access to Credit and Financial Services:

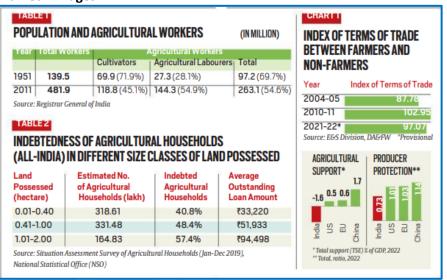
- Many small and marginal farmers in India struggle to access formal credit and financial services.
- According to the Reserve Bank of India (RBI), total agricultural credit disbursed by banks and financial institutions in India stood at Rs. 13.49 lakh crore as of March 2021.
- As a result, they often rely on informal sources of credit that come with high interest rates, leading to indebtedness and financial vulnerability.

Fragmented Land Holdings:

 India's agrarian landscape is characterized by fragmented land holdings, with a large proportion of farmers owning small plots of land.

Inadequate Infrastructure and Market Linkages:

- Poor infrastructure, including inadequate storage facilities, transportation networks, and market linkages, results in post-harvest losses and restricts farmers' access to markets.
- According to the Ministry of Agriculture and Farmers' Welfare,



the total budget allocation for agricultural and allied sectors in India for the fiscal year 2022-23 was Rs.1,76,804 crore.

Climate Change and Environmental Degradation:

- Climate change-related factors such as erratic weather patterns, droughts, floods, and pest
 infestations pose significant challenges to agricultural productivity in India.
- Moreover, unsustainable agricultural practices contribute to environmental degradation, further exacerbating the vulnerability of farmers.

Dependence on Monsoon:

Variability in monsoon patterns and the increasing frequency of extreme weather events due to climate change pose significant risks to rain fed agriculture, leading to crop failures and income losses for farmers.

Low Productivity and Technological Lag:

 Limited access to modern farming techniques, inadequate extension services, and the slow adoption of technology contribute to the overall stagnation in agricultural productivity.

Policy Distortions and Market Imperfections:

- Government policies, including procurement policies, trade restrictions, and subsidies, often distort market signals and create inefficiencies in agricultural markets.
- These distortions can lead to price distortions, market monopolies, and unequal distribution of benefits among farmers.
- Limited Diversification and Value Addition:



- The predominant focus on traditional crops and monoculture farming practices limits
 opportunities for diversification and value addition in Indian agriculture.
- Lack of access to markets for high-value crops and non-farm activities restricts income-generating opportunities for farmers.

WAY FORWARD:

Reforming Support Mechanisms:

Modernize subsidies to align with global standards for adequate farmer assistance. OECD data underscores India's low ranking in producer protection, necessitating comprehensive support reforms.

Economic Diversification Initiatives:

 Encourage diversification beyond traditional crops to boost income potential. Food and Agricultural Organisation (FAO) research highlights diversified farming's role in enhancing resilience and income stability.

Strengthening Market Infrastructure:

Invest in market infrastructure and digital platforms for direct market access. World Bank studies
indicate improved market access leads to higher farmer incomes.

Technology Adoption for Productivity Gains:

Embrace agricultural technology for productivity enhancement and post-harvest loss reduction.
 IFPRI research demonstrates technology adoption's positive impact on farmer income.

Expanding Financial Inclusion:

Provide formal credit and insurance access to mitigate income risks. World Bank reports suggest
financial inclusion can increase agricultural productivity and raise farmer incomes by up to 20%.

Empowering Farmer Entrepreneurship:

Promote entrepreneurship and skill development for new income opportunities. International
 Labour Organisation (ILO) data shows training programs have led to higher incomes for farmer
 entrepreneurs globally.

Optimizing Government Schemes:

Streamline scheme implementation for efficient resource allocation. NITI Aayog studies indicate
targeted interventions can significantly improve farmer income levels.



PRELIMS POINTERS:

24th February, 2024

TOPIC

ADITYA-L1's PAPA PAYLOAD

DESCRIPTION

WHY IN NEWS?

The Indian Space Research Organisation (ISRO) reported recently, that the Plasma Analyser Package for Aditya (PAPA) payload onboard the Aditya-L1 has successfully detected the impact of coronal mass ejections (CMEs).

FUNCTIONALITY OF PAPA PAYLOAD:

Purpose:

- PAPA serves as an energy and mass analyser designed for in-situ measurements of solar wind electrons and ions in the low energy range.
- The sensors are equipped to measure the direction of arrival of solar wind particles.

Sensor Components:

- Solar Wind Electron **Energy Probe (SWEEP):** Measures electrons in the energy range of 10 eV to 3 keV.
- Solar Wind Ion Composition Analyser (SWICAR): Measures ions in the

MAGNETOMETER STOWED energy range of 10 eV to 25 keV and mass range of 1-60 amu.

CORONAL MASS EJECTIONS (CMES):

- Coronal Mass Ejections (CMEs) are explosive releases of solar material from the Sun's corona, traveling at high speeds.
- They can disrupt space weather, causing geomagnetic storms and impacting Earth's magnetosphere and technology.
- Understanding CMEs is crucial for space weather forecasting and protecting satellites, communication systems, and power grids from their effects.

NB8 **DELEGATION'S MESSAGE AT RAISINA DIALOGUE**

WHY IN NEWS?

The NB8 delegation at Raisina Dialogue underscores trust, cooperation amid global challenges, addressing Russia's aggression, and deepening partnerships with India.

WHAT IS NORDIC BALTIC (NB) 8?

- Origin: First meeting in 1990, evolved in 2000.
- **Member Countries:**
 - Comprises five Nordic countries: Denmark, Finland, Iceland, Norway, and Sweden, and three Baltic states: Estonia, Latvia, and Lithuania.
- **Shared Ties:**
 - Based on historical, cultural, and geographical connections, fostering collaboration in politics, economics, trade, security, and culture.
- **Regional Cooperation Format:**
 - NB8 is a cooperation format that unites Nordic countries and Baltic States.
 - Includes EU/NATO members and non-members, fostering integration.

SUIT STEPS-1 SOLEXS HEL10S



- Holds regular meetings with third countries, like the US and UK.
- Annual coordinator country focuses on security, sustainability, and societal cohesion.



GUINEA WORM DISEASE

WHY IN NEWS?

The significant decline in Guinea worm disease cases and the reliance on basic public health principles underscore a monumental achievement in global health.

DRACUNCULIASIS (GUINEA WORM DISEASE):

- Caused by the parasitic worm 'Dracunculus medinensis'.
- ❖ Spread through **drinking water contaminated** with **Guinea worm larvae**.
- Primarily affects impoverished communities in Africa lacking access to safe drinking water.

TRANSMISSION AND LIFE CYCLE:

- Ingestion of copepods containing Guinea worm larvae.
- Larvae penetrate the host's stomach and intestinal wall, then migrate to connective tissues.
- ❖ After mating, **female worms** emerge from the skin, releasing larvae into water sources upon contact.

SYMPTOMS AND COMPLICATIONS:

- Symptoms typically appear a year after infection, including fever, swelling, and painful blisters.
- Adult worms, up to 1 meter long, cause excruciating pain upon emergence.
- Secondary bacterial infections can lead to prolonged disability and joint damage.

TREATMENT AND PREVENTION:

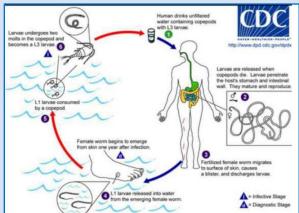
- No specific drug treatment or vaccine available.
- Worm extraction is slow and painful, requiring winding around gauze or sticks.
- Prevention focuses on filtering drinking water, cooking aquatic animals thoroughly, and avoiding water contact for infected individuals.

GLOBAL ERADICATION EFFORTS:

- **Guinea Worm Eradication Program (GWEP)** aims to eliminate the disease.
- Strategies include health education, water treatment, and providing safe water sources
- Significant progress made, with only 15 human cases reported in 2021.

CHALLENGES AND FUTURE OUTLOOK:

Persistent challenges include animal reservoirs and socio-political factors.





Eradication requires continued global cooperation and investment in public health infrastructure.

Success in Guinea worm eradication would mark a significant milestone in the fight against neglected tropical diseases.

AFRICA'S DONKEY

WHY IN NEWS?

Governments are taking action to curb donkey skin exports to China due to the detrimental impact of the trade on African donkey population.

DONKEY SLAUGHTER FOR GELATIN EXTRACTION:

- Chinese companies slaughtering millions of African donkeys for gelatin extraction.
- Unregulated trade leading to significant decline in African donkey populations.
- African Union's continent wide ban on donkey skin exports to aid population recovery.
- Heavy reliance on donkeys for transportation and agriculture in African rural households.



ABOUT DONKEY:

- They are sturdy mammals with long ears, a short mane, and coats of fur in various
- They possess hard, durable hooves adapted for walking and carrying heavy loads across different terrains.
- Known for their intelligence and resilience, donkeys form strong social bonds and have been valued historically for agricultural work and transportation.
- Donkeys have a longer gestation period compared to horses, typically giving birth to a single foal after 11 to 14 months.

ABOUT GELATIN:

- Composition: Gelatin, derived from animal collagen like cow hides and pigskins, is processed into a gel-like substance after hydrolysis.
- Versatile Use: Widely employed in foods like candies and desserts, gelatin acts as a gelling agent, stabilizer, and thickener, lending unique textures.
- Medical Applications: Gelatin is utilized in pharmaceuticals for encapsulating drugs and supplements, aiding in rapid digestion and drug delivery.
- Photography: In photography, gelatin coats light-sensitive materials, enabling image capture and precise development control.
- Industrial Uses: Gelatin's properties extend to cosmetics, adhesives, and coatings, where it serves as an emulsifier, film-former, and binding agent.

MEDARAM JATARA FESTIVAL

WHY IN NEWS?

Prime Minister Narendra Modi extended greetings on the start of the tribal festival, Sammakka - Sarakka Medaram Jatara, in Telangana.

SAMMAKKA SARALAMMA JATARA:

- A tribal festival in Telangana, India honoring goddesses Sammakka and Saralamma.
- Celebrated in Medaram, Mulugu district, attracting millions of devotees, second only to Kumbha Mela.

LEGEND OF SAMMAKKA:



Born amidst tigers, Sammakka was adopted by tribal leaders and raised as a chieftain.

Married to Pagididda Raju, a Kakatiya feudatory tribal chief, she became the savior of the region's tribals.

JAMPANNA VAGU:

- A tributary to River Godavari named after Jampanna, son of Sammakka, who died fighting against the Kakatiyan Army.
- The red-colored water symbolizes his sacrifice, believed to induce courage into the souls of the tribals.
- The Jampanna Vagu bridge stands as a testament to this historic legend.



