

GIST OF DOWN TO EARTH MAGAZINE

FEBRUARY 2022 EDITION

PART-I



**Important Articles
Simplified!**

Environmental Impact Assessment (EIA)

India State of Forest Report 2021:
Rise in Forest Cover!

Food Inflation Due to Climate Change

Threat to the Natural Habitats of Birds

Starvation Related Deaths

Index

1. Environmental Impact Assessment (EIA).....	3
2. India State of Forest Report 2021: Rise in Forest Cover!	5
3. Food Inflation Due to Climate Change.....	8
4. Threat to the Natural Habitats of Birds	10
5. Starvation Related Deaths	13



1. Environmental Impact Assessment (EIA)

Relevance

"GS 3: Environmental Impact Assessment (EIA)"

Introduction

- A signatory to the Stockholm Declaration (1972) on Environment, India enacted laws to control water (1974) and air (1981) pollution soon after. But it was only after the Bhopal gas leak disaster in 1984 that the country legislated an umbrella Act for environmental protection in 1986.
- Under the Environment (Protection) Act, 1986, India notified its first EIA norms in 1994, setting in place a legal framework for regulating activities that access, utilise, and affect (pollute) natural resources. Every development project has been required to go through the EIA process for obtaining prior environmental clearance ever since.
- The 1994 EIA notification was replaced with a modified draft in 2006. Earlier this year, the government redrafted it again to incorporate the amendments and relevant court orders issued since 2006, and to make the EIA “process more transparent and expedient.”

What is the necessity of an EIA Notification?

- An EIA notification is issued under Section 3 of the Environment Protection Act, 1986, to impose restrictions on setting up new projects or expansion or modernisation of existing projects.
- The section stipulates that such measures must benefit the environment.
- In the April 1, 2020 order, the Supreme Court also said: “For an action of the Central government to be treated as a measure referable to Section 3, it must satisfy the statutory requirement of being necessary or expedient for the purpose of protecting and improving the quality of the environment and preventing, controlling and abating environment pollution”.

What is the Current Controversy?

- Recently the Union Ministry of Environment, Forest and Climate Change (moefcc) said that it will rank the state environmental impact assessment authorities based on the speed at which environmental approvals are given.
- It has been decided to incentivise the states through a star-rating system, based on efficiency and timelines in grant of EC (environmental clearance).
- This is intended as a mode of recognition and encouragement as well as for prompting improvements.

States clear bulk of projects

- State authorities carry out the bulk of the Environmental Impact Assessments for proposed projects.
- While major ‘Category A’ projects like highways are cleared by the Centre, the rest, including mining, thermal plants, river valley and infra projects, fall under the purview of state bodies, except in case of huge projects.

Categories of Projects?

- A maze of categories— projects falling into A, B, B1 and B2—were created, with overlaps and a good measure of discretion thrown in. All in all the quality of scrutiny has not improved and development projects are not more environmentally compliant.
- Category A projects come to the Centre and B go to the state, where the state authority then decides if it is B1 (projects requiring detailed assessments) or B2 (that do not require detailed assessments).

Major Concerns

- Environmentalists warned that the state authorities, whose mandate is to ensure the protection of the environment, will now “compete” to clear projects swiftly, to increase state rankings.
- MOEFCCs recent notification basically implies that all it cares about is the “clearance” of projects, not the quality of the assessment or the ability to ensure that the environmental impacts of development projects are mitigated.
- This order is absolutely absurd as how can we grade an institution that is mandated to protect the environment according to the speed at which projects are cleared?
- The time frame for clearances was anyway brought down to 75 days, which was a matter of concern and done with the express purpose of clearing projects at the cost of the environment.

How do Development projects impact the Environment?

- There is no question that construction, especially large-scale housing, infrastructure or commercial projects, have a massive environmental footprint.
- They add to water usage, wastewater generation, traffic, and solid waste.

Why SEIAAs Formed?

- Earlier the problem was the system was never upgraded to handle the huge volume of “building” projects. This led to delays and high transaction costs—corruption, in other words.
- So in 2006, MOEFCC decentralised, and outsourced the work to states. It replicated the Central system at the state level, setting up the state environmental impact assessment authorities.
- The SEIAAs are responsible for providing environmental clearance for a bulk of the infrastructure, developmental and industrial projects. Their main purpose is to assess the impact of the proposed project on the environment and people, and to try and minimise this impact.

Conclusion

It can be argued that time taken is not an indicator of the level of scrutiny—and that MOEFCC’s notice is designed only to hold the assessment committees accountable and to ensure that projects are not unnecessarily delayed. But it is not that simple. The fact is this “ranking” is the final nail in the already built coffin of environmental assessments. Over the past decade or so, government after government has systematically decimated the process of decision-making that would allow for assessment or scrutiny. So, the government should build a proper framework or a kind of National Plan for shaping the country in an environment-friendly development mode.

2. India State of Forest Report 2021: Rise in Forest Cover!

Relevance

"GS 2 & GS 3: Conservation, Issues Relating to Development, Forest Resources"

Introduction

- India has increased its forest cover by an area roughly twice the size of Delhi in the past two years, suggests the "India State of Forest Report 2021", released on January 13, 2022, by the Forest Survey of India (FSI).
- As a result, the country's forest and tree cover has risen to 809,537 sq km or 24.62 per cent of the total land area.

Key Points

- India ranked third globally in average annual net gain in forest area between 2010 to 2020.
- India has increased its forest area significantly over the past decade, adding an average of 2,66,000 hectares (ha) of additional forest area, every year during the period.
- In other words, it has added approximately 0.38% of 2010 forest area every year between 2010 to 2020.
- India is advancing towards sustainable growth, following the ethos of economic growth with conservation, ecological security, and environmental sustainability.
- According to the India State of Forest Report 2021 (ISFR), in 2021, the total forest and tree cover in India is 80.9 million hectares, which is 24.62% of the geographical area of the country. It was 24.56% of the total geographical area as per the 2019 report.

What is a Forest Area?

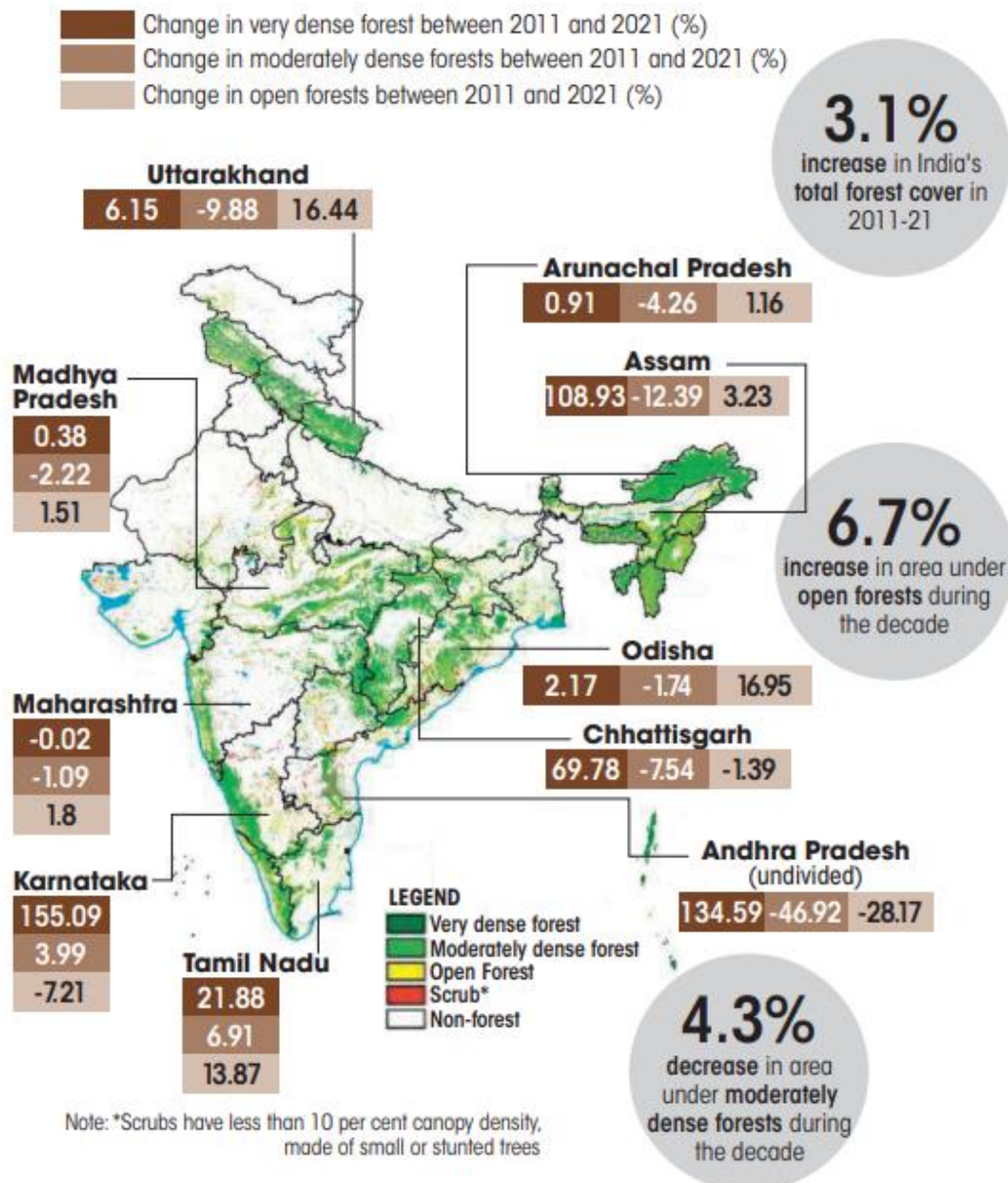
- Forest Area refers to area recorded as forest in government records and is also called "recorded forest area".
- Forest cover comprises all lands, more than one hectare in area, with a tree canopy density of more than 10%, irrespective of ownership and legal status. Such lands may not necessarily be a recorded forest area.

How much increase in forest cover?

- Forests covered 24% of India's total geographical area accounting for 2% of the world's total forest area in 2020.
- While 66% of the world's forest area is accounted for by the top 10 countries. Brazil (59%), Peru (57%), the Democratic Republic of Congo (56%), and Russia (50%) have half or more of their total geographical area under forests.

UNEVEN GREEN COVER

Seven of 10 states with most forest cover have seen a rise in open forests, while only two states have seen a rise in moderately dense forests



- The increase in total forest cover is mainly attributed to an increase in very dense forests (all lands with tree canopy density of 70% and above), which rose by 19.54% between 2011 and 2021. Further, open forest (all lands with tree canopy density between 10-40%) also improved by 6.71% however, moderately dense forest (all lands with tree canopy density between 40-70%) declined by 4.32% between 2011 and 2021.

What should be the ideal forest cover?

- According to the National Forest Policy, 1988, the country must have 33 per cent of its geographical area under forest and tree cover.

- The same has been listed as an indicator under the UN's Sustainable Development Goal 14 (Life on land) as well as the "Strategy for New India@75"

Status of Indian states

- Among the Indian States, Madhya Pradesh leads the green cover having the largest area under forests in 2021 with 11% of India's total forest cover. It is followed by Arunachal Pradesh (9%), Chhattisgarh (8%), Odisha (7%), and Maharashtra (7%).
- The top five states by per cent of State Geographical Area under Forest Cover, 2021 are Mizoram (85%), Arunachal Pradesh (79%), Meghalaya (76%), Manipur (74%), and Nagaland (74%).
- The top five states by Very Dense Forest, 2021 are Arunachal Pradesh accounting for 21% of India's very dense forest in 2021, followed by Maharashtra (9%), Odisha (7%), Chhattisgarh (7%), and Madhya Pradesh (7%).



3. Food Inflation Due to Climate Change

Relevance

"GS 3: Growth & Development, Monetary Policy, Climate Change"

Introduction

- At 14.23 per cent, India's wholesale inflation rate in November 2021 was the highest in three decades.
- December 2021 is the ninth consecutive month to see WPI rise in double digits.
- The high December inflation rate was unexpected because the government had reduced taxes on fuels—a major add-on to overall inflation.
- The current situation is being compared to the rise in food prices in 2011, which had led to riots across Asia, especially West Asia and Africa, leading to anti-government protests, popularly known as the Arab Spring, and regime changes.

What is WPI?

- Wholesale Price Index, or WPI, measures the changes in the prices of goods sold and traded in bulk by wholesale businesses to other businesses.
- WPI is unlike the Consumer Price Index (CPI), which tracks the prices of goods and services purchased by consumers.
- Primary articles is a major component of WPI, further subdivided into Food Articles and Non-Food Articles.
- The monthly WPI number shows the average price changes of goods usually expressed in ratios or percentages.
- The WPI tracks prices at the factory gate before the retail level.
- Wholesale price index (WPI) inflation is always a cause of concern since it can lead to higher retail inflation.

Why is inflation so high?

- As it emerges, food inflation, particularly the rise in prices of vegetables and a few foodgrains, has been a driver of present episodes of overall inflation.
- India's wholesale price inflation peaked in November 2021 due to a surge in primary food inflation that hit a 13-month high. In many states, prices of seasonal vegetables are seeing an unprecedented rise.
- The answer to the current surge is crop loss due to extreme weather events, and the trend is not limited to India.
- Food inflation is rising across the world.

What does the worldwide trend show?

- On January 7, the Food and Agricultural Organization's (fao's) Food Price Index showed that food prices had reached a decade high, with an average rise of 28 per cent over the previous year.
- Adjusting for inflation, the average food prices in the 11 months of 2021 are the highest in 46 years, says fao.

How does data relate to weather anomalies and rising inflation?

- Between 1956 and 2010, there were nine double-digit inflation episodes. Of these, seven were caused by drought conditions, as per the Reserve Bank of India (rbi).
- In the past six decades, there have been three major episodes of significantly high food prices globally: 1970s, 2007-08 and 2010-14. All these were triggered by weather shocks followed by factors such as an increase in oil prices, trade policy interventions and biofuel consumption.
- The current episode seems to be entirely driven by weather anomalies.

Future Expectations

While normally high prices are expected to give way to increased production, the high cost of inputs, ongoing global pandemic and ever more uncertain climatic conditions leave little room for optimism about a return to more stable market conditions even in 2022.

Earlier Examples

- A similar situation caused the last high price episode in 2019-2020. Rising prices of food items, particularly of vegetables, caused retail inflation to rise to a 68-month high of 7.59 per cent in January 2020.
- Extreme weather events had damaged crops, leading to a collapse of the supply of vegetables at a time of the year when they usually flood the markets.
- On the basis of year-on-year comparison, vegetable prices had gone up by 50.19 per cent since January 2019. They increased by 45.56 per cent in rural areas and markets during this period and by 59.31 per cent in urban areas. Of the six categories of consumption items used in tabulating the overall inflation figure, food and beverages recorded the highest price rise, thus increasing the overall inflation rate.
- In 2014, rbi pointed out: “One of the traditional explanations for rising food prices has been the supply-side shocks related to weather either because of droughts or floods.”

Impact of Climate Change Worldwide

- The current global food inflation is driven predominantly by wheat, which reported price rise due to drought and high temperature in major producing countries.
- In 2021, as various trade reports show, spring wheat production declined by 40 per cent in the U.S. Russia, the world’s largest exporter of wheat, also harvested less and has now imposed a tax on wheat export to ensure ample stock for domestic consumption.
- Unusual frosts in Brazil’s coffee bean producing areas in July 2021 have led to a production dip of up to 10 per cent. According to the forecast of the International Coffee Organization, the climatic onslaught on the world’s top coffee producer would lead to price rise for the next two years.

Conclusion

The fact is by changing the rain and its distribution, climate change is altering the very axis of agriculture.

4. Threat to the Natural Habitats of Birds

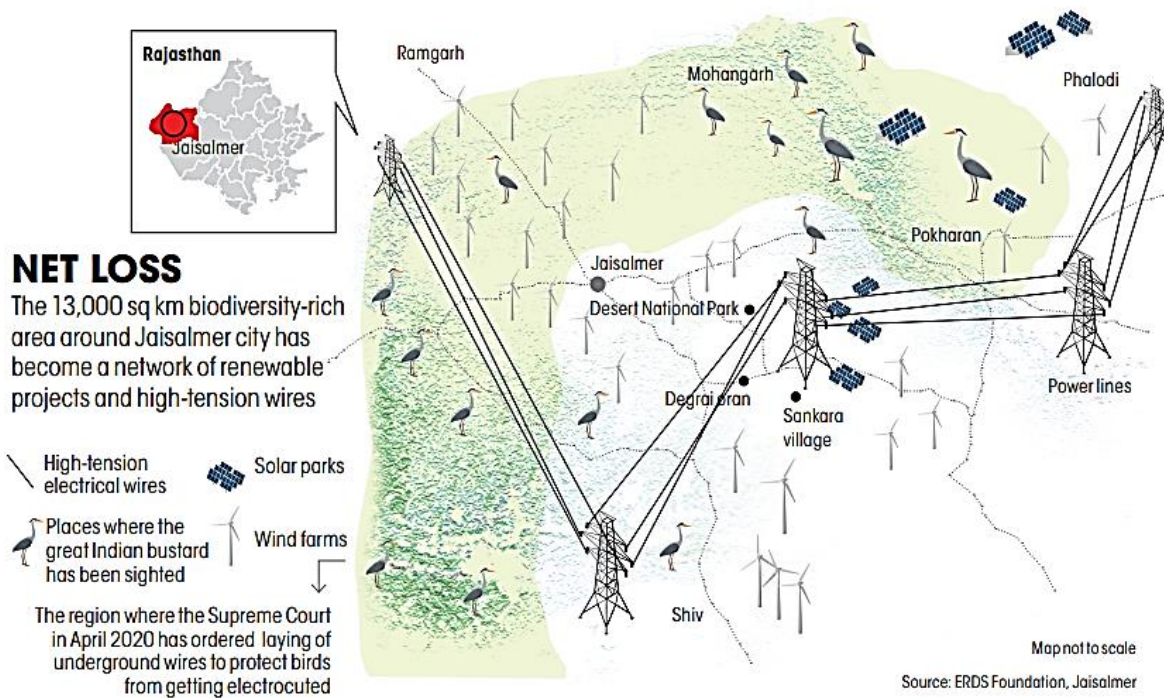
Relevance

"GS 3: Conservation, Government Policies & Interventions"

Introduction

- Rajasthan's state bird, the great Indian bustard (gib), listed under the "critically endangered" category by the International Union for Conservation of Nature in 2011 is under serious danger due to rising solar power stations and windmills in the desert area of Rajasthan.
- In 2018, the Supreme Court ordered that orans, treated as open natural ecosystems, should be declared deemed forests.
- So far there has been no development, and the state government is now welcoming power companies to the sacred groves, damaging gib habitat.
- Owing to the rising number of gib deaths, M K Ranjitsinh Jhala, a wildlife conservationist, filed a petition in the Supreme Court in 2019 urging power companies to lay underground wiring in the gib habitat in Jaisalmer.
- In April 2021, the apex court ordered power firms in Rajasthan to lay underground wiring for all projects and install diverters on existing lines in the region.

HABIT / BIODIVERSITY



- Given their size, any collision with the power lines is fatal. They get electrocuted and die.
- The power lines have formed a web around the gib habitat, leading to a sharp decline in their population in the last few years.

- Many such accidents have occurred since these high-tension wires have been laid.

What are the loopholes?

- Challenging the notion “green is always good”, conservationists insist on looking at solar and wind projects objectively.
- They say situations like the one in Jaisalmer need careful scrutiny and that renewables should not be supported blindly.
- Unlike forests, there are no conservation laws that protect against diversion of biodiversity-rich open natural ecosystems, otherwise termed as wastelands, and governments try to make them “useful and productive” by allowing solar and wind parks on them.
- This is unfortunate as research has shown that under certain environmental conditions, open natural ecosystems can sequester more carbon than if trees were planted on them.
- The value of such ecosystems is being undervalued and the benefits of renewable energy are being overstated.

Green Energy is an Uncontrolled Sector

- If we talk about solar energy, we need to see not only the gains but also the pains.
- In India, renewable energy companies are some of the most unregulated in the world.
- In the US and Europe, wind and solar companies are subject to environmental impact assessments just as any other development project. Large-scale studies are conducted on avian flyways before situating wind farms and power lines.
- In the case of hydroelectricity, the public sector controls over 90 per cent of both installed capacity and power generation. But in the case of solar and wind power, around 95 per cent of it is in the hands of the private sector.

Great Danger to The Great Indian Bustard

- Rajasthan's state bird, the great Indian bustard (gib), listed under the “critically endangered” category by the International Union for Conservation of Nature in 2011 is under serious danger due rising to solar power stations and windmills in the desert area of Rajasthan.
- Gibs are slow breeders and lay only one egg every year, that too in the wild. The eggs are sometimes destroyed by cattle, or eaten by larger animals.



- It has been well observed that transmission lines and gibs cannot coexist. Even other birds like raptors, floricans, demoiselle cranes and migratory birds get killed because of the power lines.
- Except for the Pokhran field firing range and the Desert Park, there are transmission lines everywhere in the desert area of Rajasthan.
- Even the oran has not been spared. The solar companies have taken up our oran, uprooting native trees and grasses that have not even been documented properly.

What needs to be done?

- The country needs to invest in green energy. But it does not have to be at the cost of biodiversity.
- The advantage of solar energy is that it can be distributed and decentralised.
- The government simply needs to follow its own rooftop solar policy, and modify it to become a “grey-top” solar policy, which means setting rooftops on top of industries and factories that are spread over large spaces.
- Unlike rooftop solar on residences, large industrial spaces generate enough electricity to make economic sense to connect to the grid. Such localised generation and utilisation will also cut transmission losses.
- Rooftops of public buildings can also be used for solar installations, as has been done with railway stations in some cities.
- Agrivoltaics, the practice of using farmland for generating solar power and agriculture simultaneously, as an option to increase the area under renewables.
- Deploying solar panels in a manner that allows for cultivation below them has dual benefits. The shade from the panels reduces evapotranspiration and saves water, and the panels themselves benefit from increased efficiency due to the cooling effect of the plants growing below them.
- The Alliance for Reversal of Ecosystem Service Threats, a project under atree, has identified 11 million hectares of degraded agricultural land in the semi-arid and sub-humid regions of India. If such areas were used for agrivoltaics, it could potentially transform the rural economies of these regions.

5. Starvation Related Deaths

Relevance

"GS 2 & GS 3: Government Policies & Interventions, Issues Arising Out of Design & Implementation of Policies, Health, Issues Relating to Poverty & Hunger, Important International Institutions, Food Security"

Introduction

- The government informed the Apex Court that there have been no starvation deaths in the country during recent times, even during adverse situations like the pandemic.
- But the data shows that pandemic revealed the bitter reality of hunger and poverty in India. Even before the pandemic, malnutrition and child deaths were haunting the country.
- It's strange that India does not shy away from admitting high incidences of poverty and hunger, but its reaction to starvation deaths has always been denial.

NHRC on Starvation Related Deaths

- Since mid-1990's Kalahandi Balangir-Koraput (kdk) region of Odisha reported hundreds of starvation deaths.
- In 2011, a large number of such reports from the region forced the National Human Rights Commission (NHRC) to hold its first full bench outside Delhi—in Odisha.
- Its verdict on the state government's denial of starvation deaths of 12 children, can shed some light on the ongoing debate. nhrc said starvation might not be the "immediate reason" for the deaths of the children, but the "pattern did suggest to the prevalence of a larger rot in the nutritional security of the district".
- Earlier also, reacting to starvation deaths in kdk region, it had said: deprivation, hunger and poverty all conspire one to reach to a level of starvation that ultimately kills.
- NHRC had thus recommended measures such as free kitchens, soil and moisture conservation programme, employment assurance schemes and also elaborate health infrastructure.

What do Data say?

- According to the State of Food Security and Nutrition in the World (SOFI) report, between 2014 and 2019, food insecurity increased by 3.8 per cent in India. By 2019, 6.2 crore more people were living with food insecurity than in 2014.
- Also, India accounted for 22 per cent of the global burden of food insecurity, the highest for any country in 2017-19.
- As per the National Family Health Survey (NFHS) report (2015-16), 50.4 per cent of pregnant women were anaemic.
- About 8.8 lakh children under five years died in 2018 in our country (The State of the World's Children report-2019, UNICEF). This report pointed out that malnutrition is the cause of 69 per cent of under-five deaths.

- The Global Hunger Index 2021 showed that India slipped to 101 among 116 countries, from the 94th position in 2020. We were placed lower than Pakistan, Bangladesh and Nepal.

What NITI Aayog Says?

- Poverty, hunger and malnutrition are interrelated; often, one leads to another.
- In December last year, the NITI Aayog released an index, which used health, education and standard of living as indicators to gauge the poverty level and its intensity.
- It says 25.01 per cent of India's population suffer from multidimensional poverty.
- Under the health indicator, nutrition, child mortality and maternal health were used as sub-indicators, as they have an umbilical relationship with hunger and poverty.

What does NSSO'S Survey say?

- The National Sample Survey Organisation's 66th survey in 2013 also highlighted the prevalence of hunger in India.
- For instance, it said, almost 1 per cent of the rural population did not get two square meals a day some months of the year; the figure is more than twice for farm labourers.

Why governments do not accept the reality of people dying of starvation?

- This is because starvation deaths reflect the failure of the government to protect the most fundamental right—the right to life.
- They reflect the failure of expansive welfare measures, ostensibly taken up to eradicate poverty, hunger and malnutrition.
- India has faced millions of starvation deaths in the past due to drought and famine.
- Those were always attributed to the colonial rulers. It is said that famines vanished with the descent of democracy. So, even a few starvation deaths have that power to paint an elected government in colonial hues.

 adda247

BILINGUAL



**UPSC CSE
KA MAHAPACK**

Live Classes, Video Course,
Test Series & Ebooks

12 Months Validity

BILINGUAL



TARGET 5th June (2.0)
UPSC CSE 2022 Prelims
(Paper I + II)
COMPLETE BATCH

Starts Mar 1, 2022 **6 PM to 9 PM**


BILINGUAL



**Geography Optional
Foundation course**
for UPSC CSE/State PCS 2022-23

Starts Feb 15, 2022 **2 PM to 4 PM**

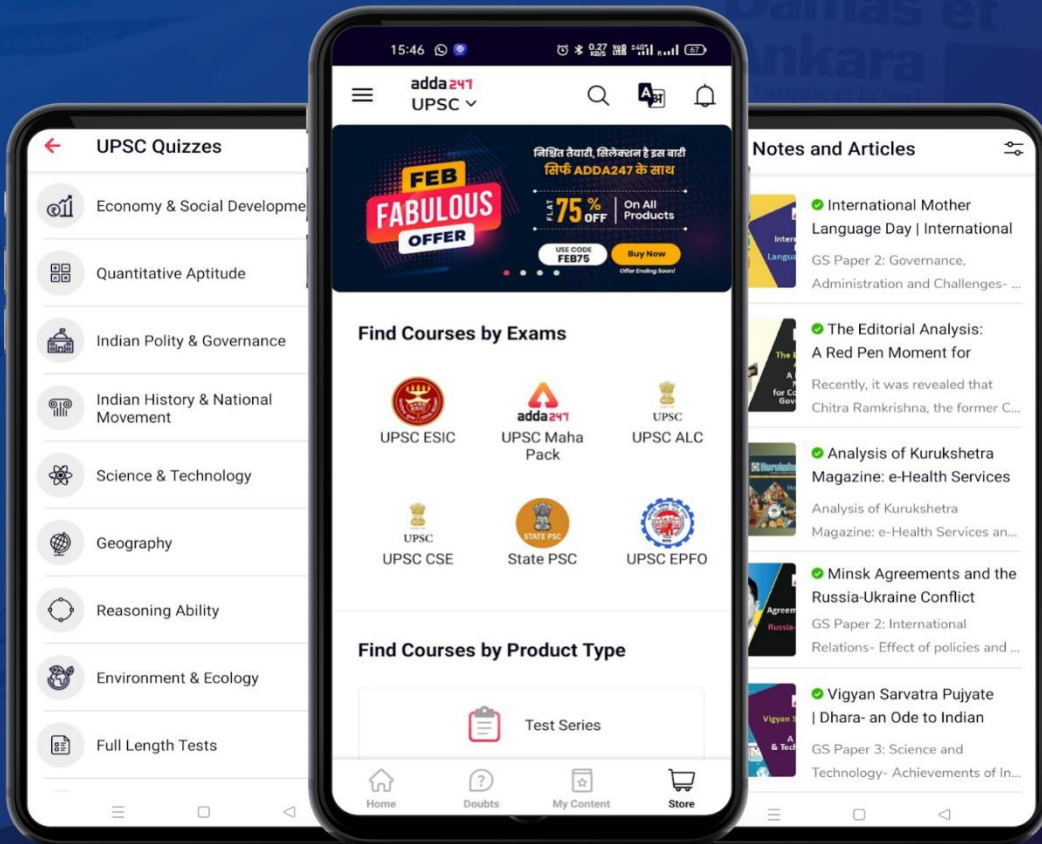
**TEST SERIES
BILINGUAL**



**UPSC CSE
PRELIMS 2022**
Comprehensive Test Series

70+ TOTAL TESTS

Prepare for
UPSC & STATE PSC EXAMS



UPSC Adda247 App Features

- Daily Top News & Headlines
- Daily Current Affairs Articles
- Daily Editorial Analysis
- General Studies Revision Notes
- Daily Current Affairs Quiz with Detailed Solutions
- Topic Wise GS & CSAT Quizzes
- Monthly Current Affairs Magazine
- Gist of Yojana, Kurukshetra & Down to Earth Magazines
- Analysis of Sansad TV Discussions
- All Content Available in Hindi Medium as well!



Download
Our App Now!

