

CURRENT AFFAIRS 5 DECEMBER 2022

8248208309

Poor soil management will erode food security

ealthy soils are essential for our survival. They support healthy plant growth to enhance both our nutrition and water percolation to maintain groundwater levels. Soils help to regulate the planet's climate by storing carbon and are the second largest carbon sink after the oceans. They help maintain a landscape that is more resilient to the impacts of droughts and floods. As soil is the basis of food systems, it is no surprise that soil health is critical for healthy food production.

World Soil Day (WSD) 2022, annually observed on December 5, aligns with this. WSD 2022, with its guiding theme, 'Soils: Where food begins', is a means to raise awareness on the importance of maintaining healthy soils, ecosystems and human well-being by addressing the growing challenges in soil management, encouraging societies to improve soil health, and advocating the sustainable management of soil.

Degradation and its consequences

Today, nutrient loss and pollution significantly threaten soils, and thereby undermine nutrition and food security globally. The main drivers contributing to soil degradation are industrial activities, mining, waste treatment, agriculture, fossil fuel extraction and processing and transport emissions. The reasons behind soil nutrient loss range from soil erosion, runoff, leaching and the burning of crop residues. Soil degradation in some form or another affects around 29% of India's total land area. This in turn threatens agricultural productivity, in-situ biodiversity conservation, water quality and the socio-economic well-being of land dependent communities.

Nearly 3.7 million hectares suffer from nutrient loss in soil (depletion of soil organic matter, or SOM). Further, excessive use of fertilizers and pesticides, and irrigation with contaminated



Konda Reddy Chavva

is Officer-in-Charge, Food and Agriculture Organization of the United Nations (FAO) Representation in India

Soil degradation can have irreparable consequences on human and ecosystem health, which cannot be ignored wastewater are also polluting soils. Impacts of soil degradation are far reaching and can have irreparable consequences on human and ecosystem health.

India's conservation strategy

The Government of India is implementing a five-pronged strategy for soil conservation. This includes making soil chemical-free, saving soil biodiversity, enhancing SOM, maintaining soil moisture, mitigating soil degradation and preventing soil erosion. Earlier, farmers lacked information relating to soil type, soil deficiency and soil moisture content. To address these issues, the Government of India launched the Soil Health Card (SHC) scheme in 2015. The SHC is used to assess the current status of soil health, and when used over time, to determine changes in soil health. The SHC displays soil health indicators and associated descriptive terms, which guide farmers to make necessary soil amendments.

Other pertinent initiatives include the Pradhan Mantri Krishi Sinchayee Yojana, to prevent soil erosion, regeneration of natural vegetation, rainwater harvesting and recharging of the groundwater table.

In addition, the National Mission for Sustainable Agriculture (NMSA) has schemes promoting traditional indigenous practices such as organic farming and natural farming, thereby reducing dependency on chemicals and other agri-inputs, and decreasing the monetary burden on smallholder farmers.

The Food and Agriculture Organization of the United Nations (FAO) undertakes multiple activities to support the Government of India's efforts in soil conservation towards fostering sustainable agrifood systems. The FAO is collaborating with the National Rainfed Area Authority and the Ministry of Agriculture and

Farmers' Welfare (MoA&FW) to develop forecasting tools using data analytics that will aid vulnerable farmers in making informed decisions on crop choices, particularly in rainfed areas.

Working with target States

The FAO, in association with the Ministry of Rural Development, supports the Deen Dayal Antyodaya Yojana-National Rural Livelihoods Mission's (DAY-NRLM) Community Resource Persons to increase their capacities towards supporting on-farm livelihoods for the adoption of sustainable and resilient practices, organic certification and agri-nutri-gardens. The FAO works in eight target States, namely, Madhya Pradesh, Mizoram, Odisha, Rajasthan, Uttarakhand, Chhattisgarh, Harvana and Punjab, for boosting crop diversification and landscape-level planning. In Andhra Pradesh, the FAO is partnering with the State government and the Indian Council of Agricultural Research (ICAR) to support farmers in sustainable transitions to agro-ecological approaches and organic farming.

There is a need to strengthen communication channels between academia, policymakers and society for the identification, management and restoration of degraded soils, as well as in the adoption of anticipatory measures. These will facilitate the dissemination of timely and evidence-based information to all relevant stakeholders. Greater cooperation and partnerships are central to ensure the availability of knowledge, sharing of successful practices, and universal access to clean and sustainable technologies, leaving no one behind. As consumers and citizens, we can contribute by planting trees to protect topsoil, developing and maintaining home/kitchen gardens, and consuming foods that are mainly locally sourced and seasonal.

Topic: Banking

Why has the Reserve Bank of India introduced an e-rupee?

What are central bank digital currencies? Are central banks introducing digital currencies to counter the influence of cryptocurrencies? Will such a move increase the risk of bank runs?

Prashanth Perumal

The story so far:

he Reserve Bank of India this week launched the digital rupee on a pilot basis. The digital currency will be offered by a select group of public and private banks in a few major cities initially, which can be used for both person-to-person and person-to-merchant transactions.

What is the digital rupee?

The digital rupee, or the e-rupee, is a central bank digital currency issued by the RBI. It is similar to the physical cash that you hold in your wallet except that the e-rupee is held electronically in a digital wallet overseen by the RBI. The digital rupee is recognised as legal tender by the RBI, and thus has to be accepted by everyone in the country as a medium

of exchange. It is, however, different from deposits that you hold in a bank. Unlike deposits which are paid interest, the digital rupees in your wallet are not paid any interest by the central bank. Deposits held in banks can be converted into digital rupees and vice-versa.

Is there a need for the digital rupee?

The RBI believes that the digital rupee will make the rupee more attractive as a currency to users when compared to cryptocurrencies. Cryptocurrencies have been viewed by many investors as alternatives to fiat currencies which progressively lose value over time due to debasement by central banks. Since such a trend could threaten their sovereignty, central banks have been trying to come up with their own digital currencies. The

RBI also believes that the digital rupee

will be easier and more economical to

produce when compared to physical cash notes. More importantly, transactions carried out using digital rupees, in contrast to physical transactions, are more easily traceable by authorities.

What are the risks?

The introduction of central bank digital currencies internationally has worried many who believe that it could disrupt the banking system. When interest rates offered by banks are low, people may be more prone to converting their bank deposits into digital currencies since they would not lose out much in the way of interest income by making the shift. Such an event could cause the cash holdings of banks to drop and hinder banks' capacity to create loans. It should be noted that the ability of banks to create loans is influenced by the amount of cash they hold in their yaults. This is because the



Topic: International organisation

OPEC+ to continue present output, despite fresh sanctions on Russia

Opec+

- Opec+ refers to the alliance of crude producers, who have been undertaking corrections in supply in the oil markets since 2017.
- OPEC plus countries include Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Russia, South Sudan and Sudan.

WE4U IAS

8248208309

OPEC

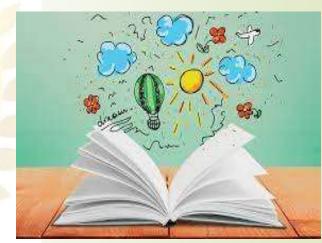
- The Organization of the Petroleum Exporting Countries (OPEC) was founded in Baghdad, Iraq, with the signing of an agreement in September 1960 by five countries namely Islamic Republic of Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. They were to become the Founder Members of the Organization.
- OPEC is a permanent, intergovernmental organization.

WE4U IAS

8248208309

- OPEC's objective is to co-ordinate and unify petroleum policies among Member Countries, in order to secure fair and stable prices for petroleum producers; an efficient, economic and regular supply of petroleum to consuming nations; and a fair return on capital to those investing in the industry.
- It is headquartered in Vienna, Austria.
- OPEC membership is open to any country that is a substantial exporter of oil and which shares the ideals of the organization.





WE4U IAS

8248208309