Green Credit Program

For Prelims: Green Credit Program, LiFE campaign, Carbon credits, Kyoto Protocol, Sovereign Green Bond, Green Energy Corridor

For Mains: Covered Activities under Green Credit Programme, Concerns Regarding Green Credit Programme.

Source: TH

Why in News?

Recently, the <u>Ministry of Environment Forest and Climate Change(MoEFCC)</u> has clarified that under the <u>Green Credit Program(GCP)</u> primacy must be accorded to **restoring ecosystems** over merely tree planting.

What is the Green Credit Program?

- About:
 - **Green Credit Program (GCP)** is an innovative market-based mechanism designed to incentivize voluntary environmental actions across diverse sectors, by various stakeholders like individuals, communities, private sector industries, and companies.
 - It is designed to foster a sustainable lifestyle and environmental conservation as part of the <u>'LiFE' initiative</u> announced by the <u>Prime Minister</u> in United Nations Climate Change Conference of the Parties (COP26).
- Covered Activities: The Green Credit program encompasses eight key types of activities aimed at enhancing environmental sustainability:
 - Tree Plantation: Planting trees to increase green cover and combat deforestation.
 - Water Management: Implementing strategies to efficiently manage and conserve water resources.
 - Sustainable Agriculture: Promoting eco-friendly and sustainable agricultural practices.
 - **Waste Management**: Implementing effective waste management systems to reduce environmental <u>pollution</u>.
 - Air Pollution Reduction: Initiatives aimed at reducing <u>air pollution</u> and improving air quality.
 - **Mangrove Conservation and Restoration:** Protecting and restoring <u>mangrove</u> ecosystems for ecological balance.
- Governance and Administration:
 - The operational framework of the Green Credit Programme involves a process where both individuals and corporations are given the opportunity to contribute financially to the restoration efforts of forests deemed 'degraded'.
 - This is facilitated through applications to the <u>Indian Council of Forestry</u> <u>Research and Education (ICFRE)</u>, an independent entity under the Environment Ministry.

- The ICFRE is responsible for overseeing the **financial contributions** directed towards **forest restoration**, which is then executed by the respective State forest departments.
- Post the afforestation efforts, a period of **two years** is observed, after which the ICFRE conducts an **assessment** of the planted trees.
 - Upon successful evaluation, each tree is assigned a value equivalent to **one 'green credit'.** These accrued green credits can then be utilised by the funding organisation in a couple of ways:
 - Firstly, they can serve as a **compliance mechanism** for organisations that have been mandated by **forest laws** to offset the diversion of forest land for non-forestry purposes by providing a comparable area of land for afforestation.
 - Alternatively, these credits can be employed as a metric for reporting adherence to <u>environmental, social, and governance (ESG) standards</u> or fulfilling <u>Corporate Social Responsibility (CSR)</u> obligations.
- Earning and Calculation of Green Credit: To earn Green Credits, participants need to register their environmental activities through a dedicated website.
 - The activities will then be subject to verification by a **designated agency**. Based on the agency's report, the administrator will grant the applicant a **certificate of Green Credit**.
 - The calculation of Green Credit is determined by factors such as resource requirements, scale, scope, size, and other relevant parameters necessary to achieve the desired environmental outcomes.
- Green Credit Registry and Trading Platform: A critical component of the program is the establishment of a <u>Green Credit Registry</u>, which will help track and manage earned credits.
 - Additionally, the administrator will create and maintain a trading platform, enabling the trading of Green Credits on a domestic market.
- Significance:
 - Aligned India's Environmental Policies: India's environmental policies, such as the Environment Protection Act, 1986, and the National Environment Policy, 2006, provide a framework for protecting and improving the environment.
 - These policies, alongside the GCP, aim to safeguard forests, wildlife, and the overall natural environment.
 - Aligned with India's Climate Goals: The GCP is part of India's efforts to adhere to international commitments, such as those made during <u>COP26.</u>
 - It complements the <u>Carbon Credit Trading Scheme</u> introduced by the <u>Energy</u> <u>Conservation (Amendment) Act, 2022</u>, and broadens the scope of tradable credits beyond CO2 reductions to include a range of sustainable practices.
 - Aligned with Global Ecosystem Restoration Initiatives: The GCP aligns with the <u>UN</u> <u>Decade on Ecosystem Restoration (2021-2030)</u>, which emphasises the scaling up of restoration efforts.
 - India's approach in this regard includes involving all stakeholders in the restoration process and leveraging traditional knowledge and conservation practices.

Does the Green Credit Program Also Cover Carbon Credits?

- The Green Credit program operates independently of the <u>carbon credits</u> provided under the <u>Carbon Credit Trading Scheme, 2023</u>, which is governed by the <u>Energy Conservation</u> <u>Act of 2001.</u>
 - **Carbon credits**, also known as carbon offsets, are permits that **allow the owner to emit a certain amount of carbon dioxide** or other greenhouse gases.
 - One credit permits the emission of 1 ton of carbon dioxide or the equivalent in other greenhouse gases.
- An environmental activity generating Green Credits may have climate co-benefits, such as reducing or removing carbon emissions, which can potentially lead to the acquisition of carbon credits in addition to Green Credits.

What are the Challenges With the Green Credit Program?

- Impact on Forest Ecology: Critics have raised concerns that the Green Credit Rules could be detrimental to forest ecology. The rules direct state forest departments to identify 'degraded land parcels' for tree plantation to generate green credits.
 - However, this approach has been criticised as **unscientific and potentially disastrous** for local ecosystems.
 - The use of terms like 'degraded' for scrubland and open forests is considered vague and could lead to **industrial-scale plantations** that may irreversibly alter soil quality, replace **local biodiversity**, and harm ecosystem services.
- Creation of Green Deserts: There is a fear that the Green Credit Rules might lead to the creation of 'green deserts'.
 - This term refers to areas where tree plantations are established without considering the ecological complexities and biodiversity of the original landscape.
 - Such plantations can **disrupt the balance of ecosystems** and do not support the diverse range of species that a natural forest would.
 - The rules have been criticised for measuring forests solely by **tree count**, which overlooks the multi-layered structure of a functional forest and its associated wildlife.
- Methodological Concerns: The methodology for generating green credits, particularly through tree planting, has been questioned for its environmental soundness.
 - Critics are concerned that the methodology does not adequately address potential **regulatory gaps** and could lead to environmental degradation.
- Pressure on 'Wastelands': The emphasis on planting trees on 'degraded land parcels' puts pressure on areas often categorized as <u>wastelands</u>, which are ecologically important.
 - These areas, like grasslands, play a crucial role in carbon sequestration and supporting unique biodiversity. The push for afforestation in these areas could lead to a loss of endemic species and ecological functions.

Way Forward

- Biodiversity-Based Afforestation: Shift the focus from tree count to biodiversity-based afforestation, where the goal is to restore diverse native species and ecosystems rather than simply planting a large number of trees.
 - This approach ensures that the newly established plantations mimic natural forests and support a wide range of wildlife.
- Technology Integration: Utilise <u>remote sensing</u> and satellite imagery to identify truly degraded lands suitable for tree plantations, minimising the risk of harming existing ecosystems.
- Transparency and Knowledge Sharing: Ensure clear and transparent definitions of terms like "degraded land" and "wasteland" within the program guidelines.
 - Promote knowledge sharing and **capacity building** among stakeholders, including forest departments, businesses, and NGOs, to ensure environmentally responsible practices.

Drishti Mains Question:

Discuss the potential environmental and socio-economic impacts of implementing a Green Credit Program. How can we ensure that such programs strike a balance between environmental conservation and socio-economic development effectively?

UPSC Civil Services Examination Previous Year Question (PYQ)

<u>Prelims</u>

Q. The concept of carbon credit originated from which one of the following? (2009)

(a) Earth Summit, Rio de Janeiro

(b) Kyoto Protocol

(c) Montreal Protocol(d) G-8 Summit, Heiligendamm

Ans: (b)

Q. Regarding "carbon credits", which one of the following statements is not correct? (2011)

(a) The carbon credit system was ratified in conjunction with the Kyoto Protocol

(b) Carbon credits are awarded to countries or groups that have reduced greenhouse gases below their emission quota

(c) The goal of the carbon credit system is to limit the increase of carbon dioxide emission

(d) Carbon credits are traded at a price fixed from time to time by the United Nations Environment Programme.

Ans: (d)

<u>Mains</u>

Q. Should the pursuit of carbon credits and clean development mechanisms set up under UNFCCC be maintained even though there has been a massive slide in the value of a carbon credit? Discuss with respect to India's energy needs for economic growth. **(2014)**

Q. Discuss global warming and mention its effects on the global climate. Explain the control measures to bring down the level of greenhouse gases which cause global warming, in the light of the Kyoto Protocol, 1997. **(2022)**

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