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UNCBD COP-16

SYLLABUS:

GS 3 > Environment and Ecology >> Biodiversity

REFERENCE NEWS:

The Sixteenth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP 16) was held in Cali, Colombia from 21 October - 1 November 2024. Under the theme **Peace With Nature**, this will be the first Biodiversity COP since the adoption of the **Kunming-Montreal Global Biodiversity Framework** at COP 15 in December 2022 in Montreal, Canada.

COP 16 will develop **the monitoring framework and advance resource mobilization** for the **Global Biodiversity Framework** as well as finalize and operationalize the multilateral mechanism on the **fair and equitable sharing of benefits from the use of digital sequence information on genetic resources.**

UNITED NATIONS CONVENTION ON BIOLOGICAL DIVERSITY:

The United Nations Convention on Biological Diversity (UNCBD), also known as the Convention on Biological Diversity (CBD), is a comprehensive international established at the Earth Summit in Rio de Janeiro in 1992 and entering into force in 1993, the UNCBD remains one of the most significant global agreements addressing biodiversity loss. The UNCBD has three primary objectives:

- **Conservation of Biological Diversity:** To safeguard ecosystems, species, and genetic diversity.
- **Sustainable Use of Its Components**: To ensure that biodiversity resources are used in a way that meets current needs without compromising future generations.
- **Fair and Equitable Sharing of Benefits**: To ensure that benefits arising from genetic resources, particularly in areas like pharmaceuticals and biotechnology, are shared fairly, especially with communities and countries providing these resources.

Key Frameworks and Protocols under the UNCBD

- **Nagoya Protocol (2010):** Focuses on the **access and benefit-sharing (ABS)** of genetic resources. It emphasizes that users must obtain consent from countries or communities when using genetic resources and provide fair compensation or benefits in return.
- **Cartagena Protocol on Biosafety (2000):** Addresses the safe handling, transport, and use of **living modified organisms (LMOs)** resulting from biotechnology, which may have adverse effects on biodiversity and human health. It emphasizes a **precautionary approach** to prevent risks associated with genetic engineering.
- **Kunming-Montreal Global Biodiversity Framework (2022):** These include the so-called **30 x 30 targets** — a commitment to put at least 30% of the world's lands and oceans, especially biodiversity rich areas, under conservation by 2030, and to initiate restoration work in at least 30% of degraded land or marine ecosystems by 2030.

India, as a signatory, has undertaken numerous initiatives under the CBD framework:

- **Biological Diversity Act (2002**): Establishes mechanisms to regulate access to biological resources and protect traditional knowledge.
- **National Biodiversity Action Plan**: Aligns with CBD targets to ensure the conservation of India's biodiversity.
- **Biodiversity Management Committees (BMCs**): Set up at the local level to conserve biological resources and empower local communities in biodiversity management.

COP-16:

COP16 can be seen as the '**first implementation COP'**. This means it will be the COP where various actors - from governments to non-state actors like indigenous communities, youth groups, businesses, financial institutions and civil society - will come together to share progress to date and explore plans for the future to contribute to the implementation of the **Global Biodiversity Framework.**

Countries are expected to submit updated National Biodiversity Strategies and Action Plans this year.

- One of the main objectives of COP16 is to **expedite progress on the 30 x 30 targets** which are the most immediate. Under the Kunming-Montreal Framework, each country is supposed to prepare and submit action plans to halt and reverse biodiversity loss within their jurisdiction.
- These National Biodiversity Strategies and Action Plans, or NBSAPs, are similar to the Nationally Determined Contributions, or NDCs, that countries have to submit under

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the 2015 Paris Agreement on climate change, mentioning their time-bound goals and actions being taken.

- Many governments are taking steps to update and assess, commit, transform and disclose their actions on nature, including at the sectoral level, and by developing a nature strategy. **Achieving the goals of the Global Biodiversity Framework, and halting and reversing nature loss by 2030 will require collective action.**
- COP16 will be the first Biodiversity COP since the adoption of the Global Biodiversity Framework. During COP 16, governments will review the progress made to implement the Global Biodiversity Framework, as well as the level of alignment of National Biodiversity Strategies and Action Plans (NBSAPs) with the Plan.
- At COP16, governments plan to further negotiate the monitoring framework, advance resource mobilization (in particular how the implementation will be financed), and finalize the multilateral mechanism on fair and equitable Access and Benefit Sharing (ABS) from the use of digital sequence information on genetic resources.
- COP16 is expected to deliver some decisions on how these digital sequences can be used, who can use them, and what a fair and equitable mechanism for sharing of profits would be, particularly for the indigenous populations who might have been the original owners of the bioresource.
- One of the 23 goals of the **Kunming-Montreal Framework is to mobilise at least $200 billion per year by the year 2030**, from all sources, for spending on biodiversity conservation. Out of this, developed countries must provide at least $20 billion every year to developing countries to support their biodiversity-related work. This money has to increase to at least $30 billion every year by 2030. Ways and means to mobilise these financial resources is one of the main items on the agenda at COP16.
- Countries at COP16 are also expected to discuss the possibility of setting up a biodiversity fund, new finance mechanisms, and biodiversity credits on the lines of carbon credits.

Attended by participants from over 190 countries, COP16 will bring together governments, observer organizations, indigenous communities, businesses, youth groups, civil society, academia, and the general public.

CHALLENGES OF UNCBD COPs IN ACHIEVING SAID TARGETS:

- **Limited Implementation and Compliance**: Countries face difficulties in translating COP commitments into concrete action due to limited financial resources, lack of institutional capacity, and inconsistent policy enforcement.
    - At COP10 in 2010, parties agreed on the Aichi Biodiversity Targets, setting 20 targets for global biodiversity conservation to be achieved by 2020. However, a UN report in 2020 revealed that none of these targets were fully met, with only six partially achieved.

- **Insufficient Financial Resources**: Adequate funding is critical for achieving biodiversity goals, yet many developing countries, where biodiversity is most at risk, lack the financial resources needed.
    - At COP15 in 2022, the Kunming-Montreal Global Biodiversity Framework set a target for mobilizing $200 billion per year for biodiversity from various sources, yet actual financial commitments are still lagging.
- **Lack of Binding Enforcement Mechanisms**: The CBD operates through voluntary commitments, meaning there are no legally binding enforcement mechanisms or penalties for non-compliance. This voluntary nature often results in slow or minimal progress, as countries are not held accountable for failing to meet targets.
    - Unlike the Paris Agreement for climate change, which includes legally binding emission reduction targets, the CBD lacks similar binding commitments. This difference has contributed to relatively slower progress in biodiversity conservation, as evidenced by the failure to achieve the Aichi Targets by 2020.
- Balancing Conservation and Development Needs: COPs face challenges in striking a balance between conservation priorities and economic development needs, particularly for countries reliant on natural resources.
    - Brazil, home to the Amazon rainforest, has faced criticism for policies that promote deforestation for agriculture and industry, conflicting with global conservation goals.
- **Equitable Benefit Sharing and Indigenous Rights:** Indigenous and local communities who steward biodiversity are often marginalized in benefit-sharing discussions, despite their critical role in conservation.
    - Although the Nagoya Protocol on Access and Benefit Sharing was adopted in 2010 at COP10, implementation has been uneven, with indigenous communities frequently reporting a lack of access to fair compensation for their genetic resources. Cases such as the Rosy Periwinkle plant from Madagascar, used in cancer treatment drugs without compensation, underscore the difficulty in ensuring fair benefit sharing.
- **Monitoring, Data Collection, and Reporting Challenges**: Accurate data is essential for tracking progress toward biodiversity targets, but many countries lack the capacity for consistent monitoring and reporting.
    - During the Aichi Target review, one major obstacle was the lack of comprehensive data on species populations, habitat loss, and biodiversity pressures. Only 20% of

countries reported data that met the criteria for rigorous assessment, leaving significant gaps in understanding global biodiversity trends.

- **Impact of Global Events and Geopolitical Tensions**: Global events like economic crises, pandemics, and geopolitical tensions often divert attention and resources away from biodiversity goals. Additionally, international cooperation becomes difficult when countries prioritize national issues over global biodiversity concerns.
    - The COVID-19 pandemic in 2020 delayed COP15 by over a year and redirected national resources and political focus to health and economic recovery. Similarly, the ongoing geopolitical tension between major players like the US, China, and Russia can affect funding commitments and collaborative efforts at COPs.
- **Coordination with Other Environmental Agreements:** There are several multilateral environmental agreements, such as the UNFCCC (climate change) and UNCCD (desertification), which often overlap with the goals of the CBD.
    - Deforestation contributes to both biodiversity loss and greenhouse gas emissions. Despite the interconnection, COP15 of the CBD and COP27 of the UNFCCC held parallel discussions on similar issues without integrated policy solutions, illustrating a missed opportunity for unified environmental action

WAY FORWARD:

- **Establishing Legally Binding Targets and Enforcement Mechanisms**: Countries could report on national biodiversity action plans and submit progress reports, with potential sanctions or penalties for significant non-compliance. This would create a sense of urgency and improve accountability.
- Increasing Financial Resources for Biodiversity: The funding gap for biodiversity can be addressed through increased contributions from developed countries, innovative financing mechanisms, and incentives for private-sector investments.
    - Costa Rica's Debt-for-Nature swap agreements help alleviate national debt in exchange for conservation efforts. A similar model could be adopted under the UNCBD to help biodiversity-rich developing nations.
- **Strengthening Data Collection and Monitoring:** Utilizing satellite imagery and AI-powered data analytics could help track deforestation rates, species populations, and habitat health. Developing a biodiversity equivalent of the Global Carbon Atlas would allow easy access to reliable data.
    - The UN Biodiversity Lab provides data and geospatial analysis tools for countries to monitor biodiversity indicators, which could be expanded and made mandatory for all signatories.

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- **Integrating Biodiversity into National Policy and Development Plans:** Countries could establish "No Net Loss" policies, ensuring any development project offsets its biodiversity impact by investing in conservation or restoration elsewhere.
    - In the European Union, the Green Infrastructure Strategy requires that biodiversity considerations are integrated into regional development, transport, and energy policies, creating a framework for balancing growth and conservation.
- **Promoting Indigenous and Local Community Participation**: Expanding the scope of the Nagoya Protocol on Access and Benefit Sharing to include indigenous rights protection can encourage communities to participate in conservation efforts and ensure fair compensation for their knowledge and resources.
    - In Canada, the Indigenous Guardians Program allows indigenous communities to oversee conservation areas, blending traditional knowledge with modern science for effective biodiversity management.
- **Strengthening Coordination Across Environmental Agreements:** Coordination between the UNCBD, UNFCCC (climate), and UNCCD (desertification) can maximize collective impact. For example, biodiversity protection, climate adaptation, and land restoration are interconnected goals, so aligning these agreements can enhance efficiency and outcomes.
    - The Great Green Wall Initiative in Africa, aimed at combating desertification, is a cross-agency project that addresses climate resilience, biodiversity, and land restoration goals simultaneously.
- **Promoting Sustainable Agriculture and Reducing Harmful Subsidies:** Reforms to agricultural subsidies and incentives for sustainable practices can reduce habitat degradation. Subsidies that encourage overuse of fertilizers or unsustainable land use should be reallocated to support practices like organic farming and agroforestry.
    - The EU's Common Agricultural Policy (CAP) is transitioning to link farm subsidies with sustainable practices, an approach that could serve as a model for biodiversity-sensitive agricultural policies globally.
- **Adopting a Rights-Based Approach to Conservation**: A rights-based approach ensures that biodiversity conservation respects the rights of indigenous and local communities. This includes recognizing land rights and providing legal support to prevent encroachments on conservation lands.
    - In Ecuador, the Constitution grants rights to nature, recognizing ecosystems as subjects of rights. Such approaches can reinforce biodiversity protection while protecting communities dependent on these ecosystems.

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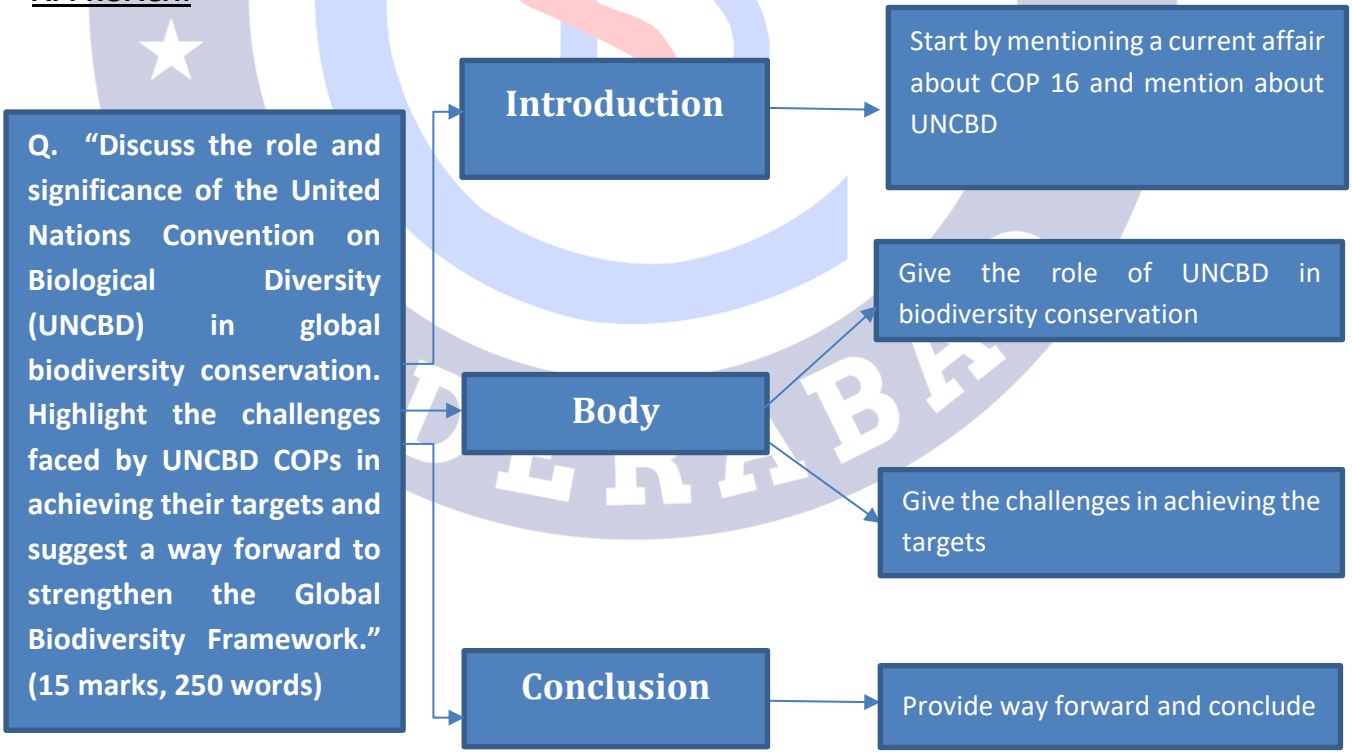
- **Developing Biodiversity Education and Public Awareness**: Annual biodiversity education programs in schools and community-based initiatives can enhance awareness and community involvement in biodiversity-friendly practices.
    - Japan's Satoyama Initiative integrates local communities in ecosystem conservation through education and community management, building local stewardship for biodiversity.
- **Building a Resilient, Inclusive Global Biodiversity Framework:** The UNCBD could form a collaborative platform for public-private partnerships, offering incentives for businesses that contribute to biodiversity-positive outcomes.
    - The Business for Nature Coalition partners with companies to integrate biodiversity into corporate sustainability practices, demonstrating the role of private sectors in biodiversity goals.

PRACTICE QUESTION:

Q. "Discuss the role and significance of the United Nations Convention on Biological Diversity (UNCBD) in global biodiversity conservation. Highlight the challenges faced by UNCBD COPs in achieving their targets and suggest a way forward to strengthen the Global Biodiversity Framework." (15 marks, 250 words)

APPROACH:



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MODEL ANSWER:

The United Nations Convention on Biological Diversity (UNCBD), COP 16 held in Cali, Columbia works to fulfil the Global Biodiversity Framework. The UNCBD's Conferences of the Parties (COPs) set targets and strategies for global biodiversity conservation, yet challenges in implementation and resource mobilization persist.

SIGNIFICANCE OF THE UNCBD

1. **Global Biodiversity Conservation**: UNCBD serves as the primary international framework for biodiversity conservation, aiming to halt species extinction, habitat degradation, and ecosystem loss through protocols like the Kunming-Montreal Global Biodiversity Framework.
2. **Sustainable Development**: The UNCBD promotes sustainable use of biodiversity resources, supporting economic development without compromising ecological health.
3. **Fair Benefit Sharing**: Through the Nagoya Protocol, UNCBD ensures that communities contributing genetic resources are compensated fairly, encouraging biodiversity-rich countries to conserve genetic resources.

CHALLENGES FACED BY UNCBD COPS

1. **Insufficient Financial Resources**: Developing countries, where biodiversity loss is most acute, face funding shortfalls. For instance, COP15 set a target to mobilize $200 billion per year, yet actual commitments fall short, impeding conservation efforts
2. **Lack of Binding Enforcement Mechanisms**: Unlike the Paris Agreement, UNCBD commitments are voluntary, leading to slower progress as countries are not held legally accountable for non-compliance.
3. **Balancing Conservation and Development Needs**: Countries rich in biodiversity, like Brazil, face pressures between conservation and economic activities such as agriculture, often compromising biodiversity goals.
4. **Indigenous Rights and Benefit Sharing**: Indigenous communities, critical to conservation, often lack fair access to benefits. The uneven implementation of the Nagoya Protocol highlights challenges in equitable benefit-sharing, especially for genetic resources used in biotechnology
5. **Monitoring and Data Collection Challenges**: Limited capacity for accurate data collection hampers tracking of biodiversity targets, with only 20% of countries meeting data standards for assessment.

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6. **Geopolitical Tensions**: Global crises, such as the COVID-19 pandemic, delayed COP15 and diverted resources from biodiversity conservation to economic recovery efforts.

WAY FORWARD FOR STRENGTHENING THE GLOBAL BIODIVERSITY FRAMEWORK

1. **Establish Legally Binding Targets**: Similar to the Paris Agreement, introducing binding biodiversity targets with sanctions for non-compliance would improve accountability.
2. **Increase Financial Resources**: Developed countries should boost funding for biodiversity. Innovative solutions like biodiversity credits, akin to carbon credits, could attract private investment.
3. **Enhance Data Monitoring**: Utilizing satellite imagery and AI for real-time monitoring can aid accurate tracking of biodiversity changes, as seen in the UN Biodiversity Lab
4. **Integrate Biodiversity in National Policy**: Countries should adopt "No Net Loss" policies to balance development with biodiversity conservation. The EU's Green Infrastructure Strategy serves as a model by integrating biodiversity into regional policies.
5. **Strengthen Coordination with Climate Agreements**: Aligning the UNCBD with the UNFCCC and UNCCD could address interconnected issues like deforestation and climate resilience, enhancing collective environmental outcomes.
6. **Develop Public Awareness Programs**: Community-led initiatives, such as Japan's Satoyama Initiative, can boost local engagement and stewardship of biodiversity

The UNCBD plays an essential role in global biodiversity conservation, but its effectiveness depends on enhanced compliance, innovative financing, and stronger data systems. By adopting these strategies, the UNCBD can build a resilient, inclusive framework for biodiversity protection, addressing both ecological and community needs while paving the way for a sustainable future.

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