

BANNI GRASSLANDS

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Context:

In a new study, researchers have assessed the suitability of different areas of Banni for sustainable grassland restoration, considering ecological value to be the primary criterion.

Background:

Grassland areas are shrinking constantly due to anthropogenic activities, threatening biodiversity as well as the ecosystem services they provide.

Global Grassland Overview:

1. Grasslands are one of the largest ecosystems in the world. They are distributed mainly in semiarid and arid areas, and include savannahs, grassy shrublands, and open grasslands.
2. They support unique species and provide crucial ecosystem services like carbon storage, climate mitigation, and pollination.
3. Grasslands are facing degradation due to deforestation, overgrazing, agriculture, urbanization, etc. Approximately 49% of global grasslands are experiencing degradation.

Grasslands in India:

1. Grasslands cover about 8 lakh sq. km, or 24% of India's total land area.
2. They are under threat from agricultural conversion, plantations, invasive species, and development projects.
3. Conservation efforts in India are biased towards forests, neglecting grasslands.

Banni Grassland in Gujarat:

1. Located in Kachchh district, Banni is one of India's largest grassland tracts, reduced from 3,800 sq. km to 2,600 sq. km.
2. A study by KSKV Kachchh University assessed Banni's suitability for restoration, focusing on ecological value.
3. Study Findings: It grouped the prospective restoration zones of the Banni grassland into five categories depending on how suitable each zone was for restoration. They have found that as much as 937 sq. km (or 36%) of the existing grassland area was "highly suitable", 728 sq. km (28 %) was "suitable", 714 sq. km (27%) was "moderately suitable", 182 sq. km. (7%) was "marginally suitable", and 61 sq. km (2%) was "not suitable" for restoration.
4. First two categories of "highly suitable" and "suitable" zones — which accounted for nearly two-thirds of the complete Banni grasslands — can be restored easily by simply providing them with adequate water sources, either through irrigation or rainwater

harvesting.

5. Moderately suitable zones also have potential, while marginally and non-suitable zones require more intensive management. It will need interventions such as terracing; with supplementary inputs like fertilizers; and protection from high water run-off and erosion, and salt intrusion.
6. The study supports evidence-based recommendations for sustainable grassland management, biodiversity conservation, and livelihood enhancement.

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