



River Rejuvenation Detailed Project Report

For Prelims: River Rejuvenation Detailed Project Report, Net Zero Emissions, India's Net Zero by 2070 targets, CoP-26, Renewable Energy Targets, CoP-26

For Mains: Government Policies & Interventions, River Rejuvenation Detailed Project Report, benefits and associated challenges

Why in News?

Recently, the **Ministry of Environment, Forest and Climate Change** released **Rs. 19,000-crore Detailed Project Reports (DPRs)** on rejuvenation of 13 major rivers through forestry interventions.

- These 13 rivers are Jhelum, Chenab, Ravi, Beas, [Sutlej](#), [Yamuna](#), [Brahmaputra](#), [Narmada](#), [Godavari](#), [Mahanadi](#), [Krishna](#), [Cauvery](#), and [Luni](#).

What was the idea behind these DPRs?

- It is **modelled on the lines of the work done** as part of the [National Mission for Clean Ganga \(NMCG\)](#) in 2015-16 for the river and acknowledging that the growing water crisis is on account of degradation of river ecosystems,
- The project adopted a **multi-scale, multi-stakeholder, multidisciplinary and holistic approach** so as to accomplish broad objectives of **'Aviral Dhara' (uninterrupted flow)**, **'Nirmal Dhara' (clean water)**, and ecological rejuvenation.

How much area/landscape is Expected to be Rejuvenated?

- The **13 rivers collectively cover a total basin area of 18,90,110 square kilometres** that represents **57.45% of the geographical area of the country**.
- The length of 13 rivers, including **202 tributaries** within the delineated riverscapes, is **42,830 km**.
 - The **Brahmaputra Riverscape incorporated the highest number of tributaries (30)** and 1,54,456 sq km area, respectively.
- The documents propose **many kinds of afforestation for the rivers**. They include timber species, medicinal plants, grasses, shrubs and fuel fodder and fruit trees.

What are the Interventions Planned?

- The DPRs recognise the **merit of adopting a holistic riverscape approach for forestry interventions** in three types of landscapes viz., **natural, agriculture, and urban** within the vast expanse of a riverscape besides conservation interventions including soil and moisture conservation measures, **riverine and riparian wildlife management**, and [wetland management](#).
- These are done with **supporting activities** such as policy level interventions, strategic and adaptive research, capacity development, awareness creation, project management and

participatory monitoring & evaluation).

What are the Potential Benefits of the Proposed Interventions?

- **Increase in Forest Cover:**
 - It is expected to **increase the cumulative forest cover** of 7,417.36 sq km across 13 riverscapes.
- **Help in Sequestration of CO₂:**
- Proposed interventions would **help in sequestration of CO₂** to the extent of 50.21 million tonnes of CO₂ equivalent in 10-year-old plantations while the value of estimated CO₂ sequestered in 20-year-old plantations would be 74.76 million tonnes of CO₂.
- **Help in Groundwater Recharge:**
 - They would help **recharge groundwater, reduce sedimentation**, generate Rs. 449.01 crore from non-timber and other forest produce.
- **Employment Generation:**
 - They are also expected to make a **significant contribution towards employment generation** by way of nearly 344 million man-days of work.
- **Achieving International Commitments:**
 - These efforts would **help India meet its international climate commitments** of:
 - Creating an **additional carbon sink of 2.5 -3 billion tonnes** of CO₂ equivalent through additional **forest and tree cover** by 2030 under the **Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC)**,
 - Restore 26 million hectares of degraded lands by 2030 and
 - Halt biodiversity loss by 2030 under **Convention on Biological Diversity (CBD)** and **Sustainable Development Goals**.
 - At the **COP26** meeting, India promised to reduce its projected **carbon emission by one billion tonnes by 2030**, meet 50% of energy requirements with **renewable energy** by 2030, enhance **non-fossil energy** capacity to 500 gigawatt by 2030, reduce the carbon intensity of its economy by 45% by 2030 and **achieve net zero emission** by 2070.
 - Under the **Bonn Challenge**, India had also **pledged in 2015 to restore five million hectares of degraded land by 2030**.

PYQ

Momentum for Change: Climate Neutral Now” is an initiative launched by (2018)

- (a) The Intergovernmental Panel on Climate Change
- (b) The UNEP Secretariat
- (c) The UNFCCC Secretariat
- (d) The World Meteorological Organisation

Ans: (c)

What are the associated Challenges?

- **Growing water crisis** on account of depleting fresh water resources especially due to **shrinking and degradation of river ecosystems** is a major impediment to achieving national goals pertaining to **environment, conservation, climate change and sustainable development**.
- The **success of the project hinges on several factors**, including the correct method of plantation and changes in climate.

Way Forward

- To avoid risks of plantation and changes in climate, the forest department **should ensure the “quality of planting stock, particularly age and size are important aspects,”** and that conservation of soil and moisture should be done before plantation to further mitigate risk.

PYQ

Which of the following are the key features of 'National Ganga River Basin Authority (NGRBA)'? (2016)

1. River basin is the unit of planning and management.
2. It spearheads the river conservation efforts at the national level.
3. One of the Chief Ministers of the States through which the Ganga flows becomes the Chairman of NGRBA on rotation basis.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Ans: (a)

[Source: PIB](#)

PDF Refernece URL: <https://www.drishtiias.com/printpdf/river-rejuvenation-detailed-project-report>