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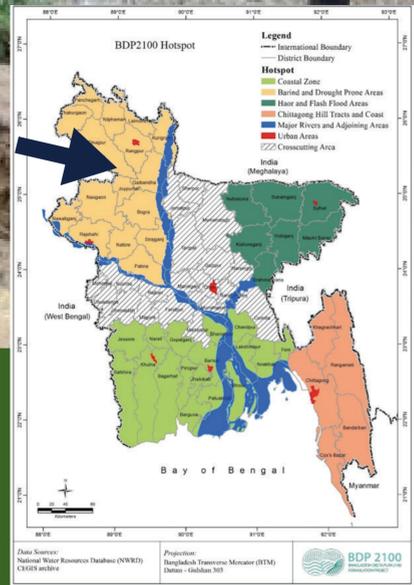
GFDRR
Global Facility for Disaster Reduction and Recovery



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Green Roads for Water Hotspot: Barind



Opportunities and Challenges

- 1 Water harvesting with roads to address water scarcity.**
 - ➔ Use variety of road water harvesting measures: routing water from drains to recharge areas or storage ponds; using porous pavement for percolation; using roadside excavation trenches for storage and recharge
- 2 Responsible sourcing: avoid depleting sand and gravel from vulnerable rivers, as this will undermine their water holding and flood retention and recharge capacity.**
 - ➔ Use alternative non-sand road pavements; use crushed sand instead; or use excavation material from derelict canals and ponds
- 3 Road protection against flash floods – capturing as much as possible from flash floods.**
 - ➔ Nature-based vegetative protection and armoring of exposed sections
- 4 Optimize functions with well-planned roadside vegetation.**
 - ➔ Vegetation planting and species selection for direct productive use, embankment stability, dust/ pollution control, noise reduction, biodiversity

Examples of techniques



Water harvesting: guiding water from culverts to recharge areas and storage



Using porous pavement for water percolation



Responsible sourcing: use manufactured sand



Optimize roadside vegetation



Increasing Resilience of Rural Infrastructure and Local Communities through Green Roads Concept