



Ken-Betwa Link Project

For Prelims: [Ken-Betwa Link Project](#), [National Perspective Plan](#), [Floating Solar Energy Project](#), Ken River, Betwa River, [Panna Tiger Reserve](#)

For Mains: National Perspective Plan for Interlinking Rivers, River-linking in addressing drought and migration, Water management

Source: [TH](#)

Why in News?

Recently, Prime Minister Narendra Modi laid the foundation stone for the [Ken-Betwa Link Project \(KBLP\)](#) in Khajuraho, Madhya Pradesh.

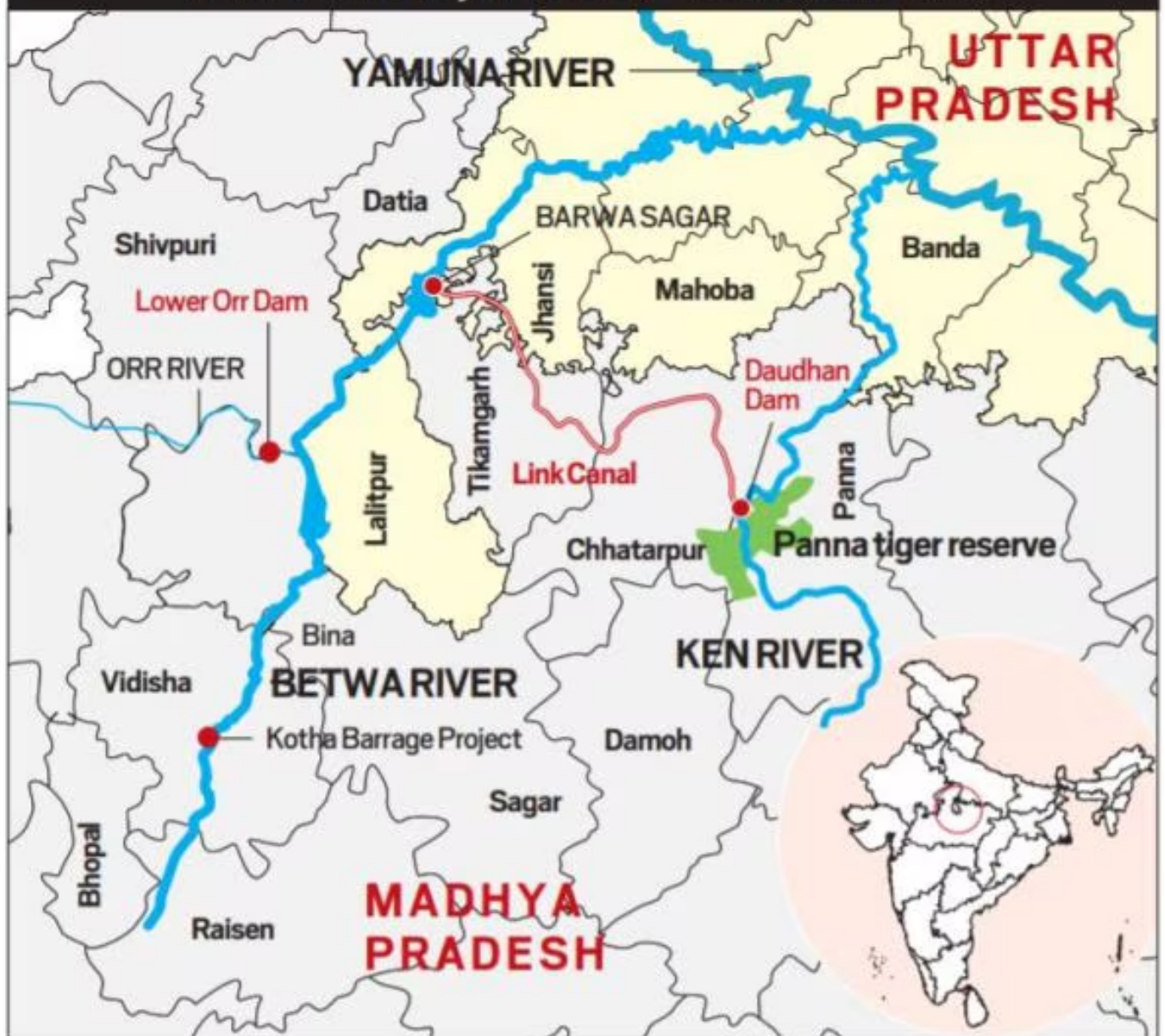
- This Rs 45,000 crore initiative, part of the [National Perspective Plan \(NPP\)](#) for interlinking rivers, aims to resolve water scarcity in **Bundelkhand**.

Note: Alongside the KBLP, PM laid the foundation stone for the **Daudhan Dam irrigation project**, which will serve **11 lakh hectares of land** in the region.

- The PM also inaugurated **Madhya Pradesh's first floating solar energy project at Omkareshwar**, marking a significant step toward [renewable energy adoption](#).

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TWO STATES, TWO RIVERS AND A LINK



What are the Key Facts About Ken-Betwa Link Project?

- **About:** The KBLP is India's first initiative under the NPP, formulated in 1980 for river interlinking, implemented by **Ken-Betwa Link Project Authority**.
 - It aims to transfer surplus water from the **Ken River in Madhya Pradesh to the Betwa River in Uttar Pradesh**, both of which are tributaries of the **Yamuna**.
- **Phases of the Project:**
 - **Phase I:** Construction of the **Daudhan Dam complex**, low-level and high-level tunnels, Ken-Betwa link canal, and powerhouses.
 - **Phase II:** Development of the Lower Orr Dam located across the **Orr River** (a tributary of the Betwa), Bina Complex Project, and Kotha Barrage.
- **Benefits:**
 - Irrigation for **6.3 lakh hectares** annually.
 - Drinking water supply for 62 lakh people.

- The project includes provisions for **hydropower generation** (100 Megawatt (MW)) and **solar energy** (27 MW).
- **Importance for Bundelkhand:** Bundelkhand is a geographical region, which spans 13 districts in Uttar Pradesh and Madhya Pradesh.
 - Bundelkhand has **long faced droughts and water shortages**, forcing migration for employment.
 - The KBLP enhances drinking water access, boosts agriculture with reliable irrigation, and fosters regional development, reducing migration pressures.
- **Environmental Concerns Raised by Critics:**
 - The opposition has voiced concerns over the **project's environmental impact, particularly on the Panna Tiger Reserve**, which could see over 10% of its core area submerged.
 - Critics argue that the **project could cause significant loss of wildlife habitats**, including those of tigers, vultures, and other species.
 - Over 23 lakh trees are expected to be felled, and construction activities could severely disrupt the local ecosystem.
- **Government Response:** Assured that the project construction would consider the preservation of the **Panna Tiger Reserve's wildlife** and that measures would be implemented to mitigate the project's adverse effects on the local ecosystem, balancing development and conservation.





जल शक्ति मंत्रालय
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation,
Government of India

The Bundelkhand Boon Ken-Betwa Link Project

approved by Union Cabinet on 08-12-2021

Objective



is to improve socio-economic condition of water starved regions of Madhya Pradesh and Uttar Pradesh



Employment Generation

About 5,000 person

Project



Centre and State Federalism



Budget and Funding

INR 44,605 Crore

Scale

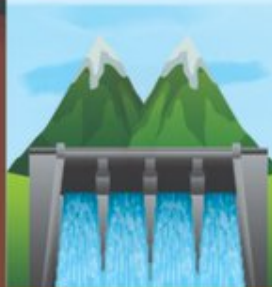
Annual Irrigation of 10.62 lakh ha, drinking water supply to a population of about 62 lakhs, generate 103 MW of hydropower and 27 MW solar power utilizing about 4843 MCM of Water

Project at a Glance

Project Component



Irrigation, hydropower and water supply benefits



Implementing Agency



Ken Betwa Link Project Authority



Key Facts About Ken and Betwa Rivers

- **Ken River:** The Ken River originates near Ahirgawan village on the north-west slopes of the Kaimur hills in Jabalpur, Madhya Pradesh.
 - The river merges with the Yamuna at Chilla village near Fatehpur, Uttar Pradesh.
 - Ken River is known for the rare **Sajhar stone**. Its major tributaries include Bawas, Dewar, Kaith, Bank, Kopra, and Bearma.

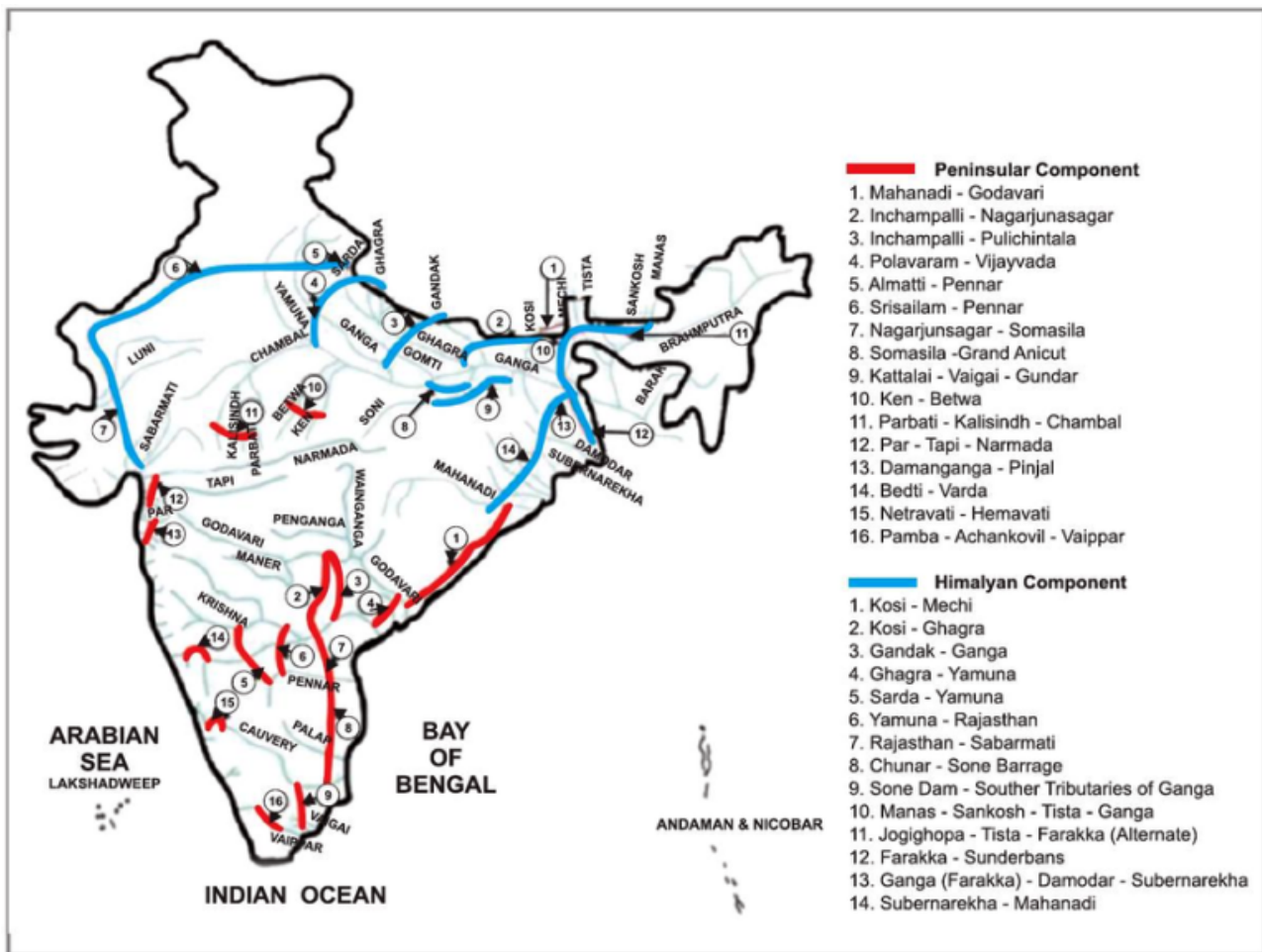
- **Betwa River:** Betwa, originates in the [Vindhya Range](#) in Madhya Pradesh, flows through Bundelkhand, and meets the Yamuna at Hamirpur, Uttar Pradesh.
 - The major tributaries of Betwa are **Newan, Orr and Dhasan**. In ancient times, the Betwa was known as **Vetrawati**.

Origin of River-Linking Projects in India

- **Sir Arthur Cotton (19th Century):** The idea of linking rivers was first proposed by **Sir Arthur Cotton**, a British engineer, to connect the [Ganga](#) and [Cauvery](#) for navigation and irrigation.
 - The Periyar Project, constructed in 1895, is a major irrigation project that diverts water from the **Periyar River basin in Kerala** to the **Vaigai River basin in Tamil Nadu**
- **National Water Grid:** Dr. K.L. Rao, the then Union Irrigation Minister, proposed the construction of a **National Water Grid in the 1970s**.
 - It aims to transfer water from water-surplus regions to water-deficit areas.
- **Garland Canal:** Captain **Dinshaw J Dastoor** proposed a Garland Canal to redistribute the water from one area to another.
- **National Perspective Plan (1980):** Prepared in 1980, aimed at inter-basin water transfer.
 - In 1982, the [National Water Development Agency \(NWDA\)](#) was established to conduct water balance and feasibility studies for the linking of rivers.

What is the National Perspective Plan (NPP) for Interlinking Rivers?

- **About:** Formulated in 1980 by the Ministry of Irrigation (now Ministry of Jal Shakti), the NPP aims to develop water resources through the inter-basin transfer of water.
 - The [NWDA](#) has been entrusted with the work of Interlinking of Rivers under the NPP.
- **Components:** The plan has two main components: the Himalayan Rivers and Peninsular Rivers Development.
 - **30 link projects:** 16 under the Peninsular Component, 14 under the Himalayan Component.
 - **Peninsular Rivers Development Component:** Focuses on linking rivers in southern and central India. Key projects include the **Mahanadi-Godavari**, Godavari-Krishna, and Ken-Betwa links.
 - **Himalayan Rivers Development Component:** Aims to divert surplus water from eastern tributaries of the Ganga and Brahmaputra to the western regions. Notable projects include the **Kosi-Ghaghra and Gandak-Ganga links**.
- **Significance:** Addresses water shortages in states like **Rajasthan, Gujarat, Andhra Pradesh, Karnataka, and Tamil Nadu**.
 - Improves irrigation, boosts agricultural productivity, and enhances food security.
 - Promotes **inland waterways** for freight movement, and utilizes surface water to alleviate groundwater depletion and reduce freshwater flowing into the sea.



Drishti Mains Question:

Evaluate the National Perspective Plan for river interlinking in India and its implications for sustainable water management?

UPSC Civil Services Examination, Previous Year Question (PYQ)

Q. The interlinking of rivers can provide viable solutions to the multi-dimensional inter-related problems of droughts, floods, and interrupted navigation. Critically examine. **(2020)**

PDF Reference URL: <https://www.drishtias.com/printpdf/ken-betwa-link-project-3>