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C-PACT WATER BULLETIN

CPACT & WSP (Water Science Program) presents a news bulletin of latest news from India and abroad on debates, concerns, and events related to water.

Ken-Betwa: Exploring the Interlinking of Rivers

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Access to freshwater, to produce food for people, plants and animals, to operate industries and provide drinking water for cities, is a major challenge. Rivers have always been a source of freshwater. Many rivers have seen many civilizations settling and evolving on their banks. They have shaped our landscape, carried nutrients through their flows, silt and sediments. As habitats, homes and breeding grounds, for many plants and animal species they are significant components of the environment. The ecosystem services that rivers have provided human beings are a gift of nature; signifying an inalienable right to life that rivers have. With the advent of industrial revolution, mechanization and pollution, excessive water withdrawal and greed for maximizing growth have threatened these rivers and life in and around them.

The concept of "interlinking" is a colonial legacy from the British era where interlinking production terrains through railway routes was a means to expand trade. The Government of India is now determined on interlinking of rivers, as a means to address the present water scarcity in various parts of the country. The main objective behind this is to transfer the surplus waters from some river basins to deficit river basins (Goparaju et al, 2017). The massive "Garland Project" aims to link 14 Himalayan and 16 Peninsular rivers. The concept was initially proposed during British rule around 1839 by Arthur Cotton to link the rivers as a means of inland transportation. Later in 1982, the Government of India established National Water Development Agency (NWDA). The idea of river interlinking was then taken forward by the former President of India, A.P.J. Abdul Kalam (Islam, 2006). The stated benefits from this project include employment generation, poverty alleviation, hydropower generation (estimated to be approximately 34GW annually), increased irrigation potential, fishing and tourism, flood and drought mitigation and much more.

Ken-Betwa Interlink has been proposed to be the first and is expected to divert 659 million cubic metres from Ken river to the Betwa river and is expected to cost around 9000 crores. The basin areas covered by the two rivers include the Bundelkhand region. The project aims at working in two phases. Phase 1 constitutes of construction of an earthen and a concrete filled dam near Daudhan village along the Ken river with its height reaching up to 73.5m. The estimated cost is around Rs. 9000 crores and it has the capacity to irrigate around 6 lakh hectares of land in Panna, Chhattarpur, Tikamgarh districts (Madhya Pradesh), and Banda, Mahoba and Jhansi (Uttar Pradesh). As the region of Bundelkhand is drought prone, this project is aimed at mitigating droughts and reviving the dried-up water bodies in the region. The project has been considered to be a cost-effective solution for ensuring food and water security.

While the economic benefits have been considered, the associated environmental and ecological impacts have not been properly acknowledged. The concept of 'surplus' and 'deficit' itself is also not very clear. In nature there are no surpluses or deficits in the flow of a river; even a monsoonal flood or the

seasonal drying of the river bed are part of the natural cycle of a river. The objective of transferring water from full flowing rivers to rivers in drought prone regions without considering the consequences in terms of geological, hydrological and ecological parameters, is flawed. The area near Daudhan Dam passes through Panna National Park which is home to several keystone species, especially tigers. The national park has also been a part of Project Tiger1973 and is spread over 560 sq km of area that encompasses districts of Panna and Chhatarpur in Madhya Pradesh. In addition to that, both Ken and Betwa rivers are a habitat for various species such as ghariyals, crocodiles, snakes, fishes and aquatic fauna and more than 300 species of birds. The wildlife in these river basins comprises of leopards, sambhar, deer, antelope and trees such as teak, ebony, ash tree, mahua etc. which are revered and also form a part of the basic food chain. In addition, it is known that this project will affect the local geohydrology, cause the depletion of aquifers, change in river flow patterns, cause social and cultural disruption, and also increase river sharing disputes. These impacts along with the extreme impacts on habitat loss and biodiversity loss which affect the environment, make the current cost estimates of the project miniscule and highly under-estimated. The geography, hydrology, geology and ecology of Bundelkhand region need to be clearly understood and analyzed, with people's participation, before giving environmental clearance.

With the technological advancement and engineering approach, societies have always taken steps taken to control the rivers and their flows and taming them according to the society's own needs. The concept of interlinking is broadly focused on supply side management and changes are made on the basis of this concept in the policy realm. The examples of river interlink are not just limited to India, but also globally such as in China and Bangladesh. There is a need to abolish the concept of "dams;" despite being considered the "temples of modern India." They represent the logic of capital investments and huge infrastructure, proving that environmental problems can only be solved by technocratic approaches that subjugate and control nature. A project like the Ken-Betwa interlinking will bring numerous plant and animal species to the verge of extinction (Bandyopadhyay and Parveen, 2004). There is a desperate need for firm scrutiny of the policy and decision-making processes towards interlinking rivers. An environmental justification and action plan (and not a techno-fix) is crucial for successfully addressing water problems.

References:

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2. Goparaju, Laxmi. Ahmad, Firoz. Thakkar, Himanshu. Submergence analysis of the proposed Ken Betwa Dam (Madhya Pradesh) India, using geospatial technology in Environmental Impact Assessments, (2017), pp. 18-28.

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5. Jhala, Y.V., Qureshi, Q. and Nayak, A.K. (eds) 2020. Status of tigers, Copredators and prey in India, 2018. National Tiger Conservation Authority, Government of India, New Delhi, and Wildlife Institute of India, Dehradun.

Latest News

NABARD launches refinance scheme for WASH programme, earmarks Rs 800 cr for FY''21

In a bid to promote sustainable and healthy lifestyle in rural areas, National Bank for Agriculture and Rural Development (NABARD) on Thursday announced a special refinance facility to support the government''s Water, Sanitisation and Hygiene (WASH) programme.
An amount of Rs 800 crore has been earmarked for this purpose for the financial year 2020-21, NABARD said in a statement.
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J&K to complete Jal Jeevan Mission by 2022

The Administrative Council (AC), which met here under the chairmanship of Lieutenant Governor, Manoj Sinha, approved the proposal of the Jal Shakti Department to modify the roadmap for ensuring 100% piped water supply in rural areas under Jal Jeevan Mission by December, 2022 owing to the COVID- 19 pandemic induced delays.
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Centre notifies revised guidelines for ground water use; prohibits new industries, mining projects in 'over exploited zones'

Centre notifies revised guidelines for ground water use; prohibits new industries, mining projects in 'over exploited zones'

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2.25 lakh people affected due to fresh wave of floods in 9 Assam districts

The flood situation in Assam remains grim as more than 2.25 lakh people have been affected across the state.
The water levels of the Brahmaputra river and its tributaries have been rising following incessant rains in the last few days.
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Govt. scraps 2014 order on inter-State water disputes

The Water Resources Department has scrapped a 2014 order which sought to prevent the release of information regarding inter-State water disputes under the Right to Information Act.
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Goa becomes first 'Har Ghar Jal' state by providing tap water connections in rural areas

Goa has become the first 'Har Ghar Jal' state in the country by providing 100% tap water connections in rural areas covering 2.30 lakh households, the Jal Shakti Ministry said on Friday.
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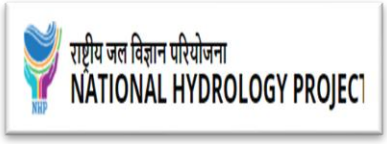

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Call Of Abstracts For Oral And Poster Presentation:

the participants are invited to submit their abstracts and full length papers on the theme and sub themes of the Conference. The abstracts will be released in 'Souvenir and Abstract Book' during the Conference, while selected full length papers will be published freely in 'International Journal' or Proceedings of the Conference or Edited Book. The participants may send their abstracts by 30th August, 2020
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Student Highlight

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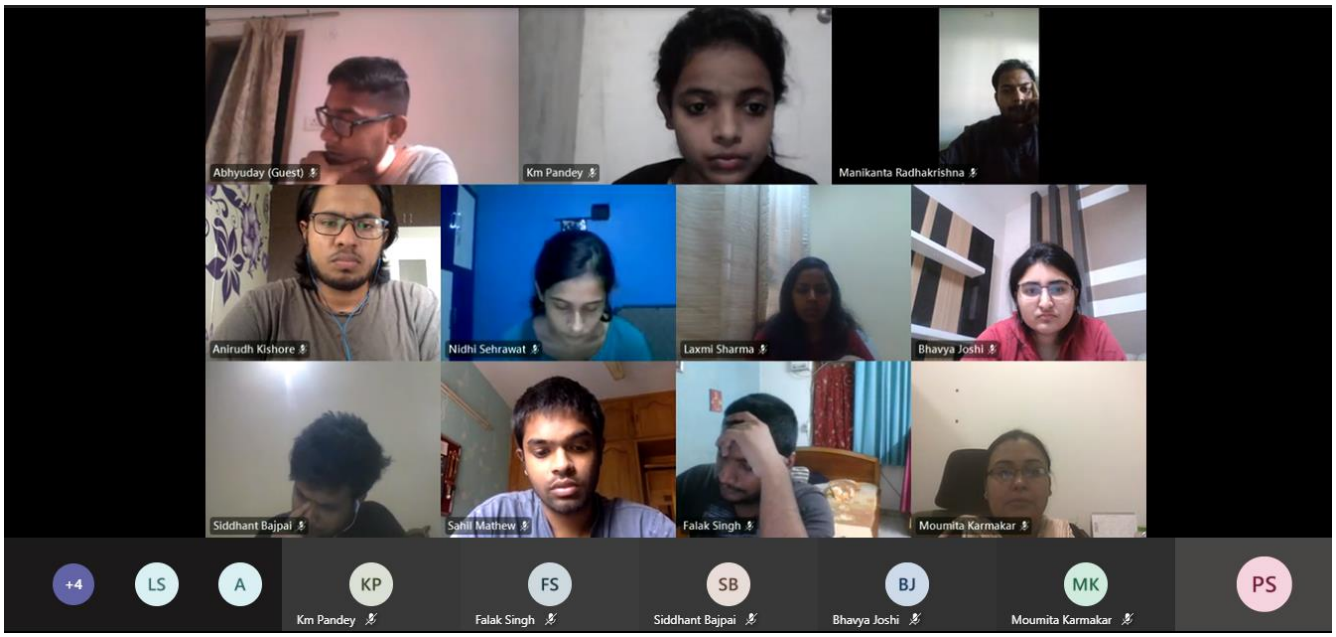

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