



◆ Editorial/ सम्पादकीय ◆

लगभग डेढ़ माह बाद बहुप्रतीक्षित कुम्भ मेला प्रयाग में शुरू होगा। यह मेला भारतीय संस्कृति, परंपरा, आध्यत्म, पर्यावरणीय सामंजस्य एवं विविधता का एक अनूठा प्रतीक है। कुम्भ मेला के मौलिक अर्थों को सपष्ट करते हुए मेला की आधिकारिक वेबसाइट बताती है कि यह संस्कृतियों का समागम और मानवता, नदियों, वनों एवं जीवन का प्रवाह है। कुम्भ में स्नान करने वाले श्रद्धालुओं को गंगा और यमुना के संगम का पानी पवित्र एवं अमृत समान होता है। हालांकि बढ़ते प्रदूषण, पर्यावरण को विगत दशकों में हुई अपूरणीय क्षति, बदलते मौसम एवं इन सब से निपटने के लिए व्यक्तिगत, प्रशासनिक एवं राजनैतिक अक्रमण्यता ने गंगा और यमुना के पानी को इतना दूषित कर दिया कि यह न पीने के लिए और ना ही नहाने के लिए उपयुक्त है। सेंट्रल पोल्लुशन कंट्रोल बोर्ड के तमाम आंकड़े दर्शाते हैं कि प्रयाग सहित गंगा तट पर अधिकतर स्थानों पर पानी प्रदूषण के कारण विषेला है।

कुंभ एक सांस्कृतिक एवं धार्मिक आयोजन है लेकिन इस आयोजन में शासन की भागीदारी एवं दखल शदियों से रहा है। प्रयाग कुम्भ में शासकों के प्रभाव एवं दखल की विवेचना करने वाली पुस्तक- 'Pilgrimage and Power', गुप्त राजवंशों में राजा हर्षवर्धन से लेकर ब्रिटिश राज का जिक्र है। हर्षवर्धन द्वारा मेले में आये श्रद्धालुओं को दान देने का प्रमाण है जबकि ब्रिटिश राज के दौरान श्रद्धालुओं की भीड़ को नियंत्रित करने और आयोजन से बीमारियों के फैलने से बचाव के प्रबंध का जिक्र है। इन सब से बढ़कर वर्तमान में राज्य सरकारों ने कुंभ आयोजन की पूरी जिम्मेदारी ले ली है। अब राज्य सरकारें ही लोगों को कुंभ मेले में शामिल होने के लिए आमंत्रण देती हैं।

समय-समय पर शासकों ने आवश्यकतानुसार अपना दखल दिया है, लेकिन आज जो सबसे महत्वपूर्ण आवश्यकता है, वह है गंगा और यमुना के पानी को नहाने व पीने योग्य बनाये रखना। उत्तर प्रदेश सरकार दावा कर रही है कि उसने मेले के आयोजन की सभी तैयारियां कर ली हैं लेकिन पानी की निर्मलता पर कोई काम नहीं हुआ है। सरकारी आंकड़ों के अनुसार माह सितम्बर 2018 में भी गंगा का पानी प्रयाग में नहाने व पीने के लिए अनउपयुक्त था। ऐसे में कुंभ का यह सरकारी आमंत्रण बीमारियों और विषपान का आमंत्रण भर रह गया है। ग्रीन वाॅच के इस अंक का मुख्य आलेख प्रदूषित गंगा में कुम्भ मेला के आयोजन से उपजने वाली स्वास्थ्य समस्याओं की विवेचना करता है। इसके अलावा गंगा की निर्मलता एवं अविरलता के अलग-अलग आयामों पर भी लेख सम्मिलित हैं। आशा है, पाठकों को यह अंक पसंद आयेगा। हमारी टीम इस प्रयास को और बेहतर बनाने के लिए आपके सुझावों की आकांक्षी है।

In This Issue

COVER STORY

Kumbh Mela 2019: An Invitation for Diseases and Epidemics

OTHER STORIES

आरामदायक राजमार्ग के लिए कई नदियों का बलिदान

Self Rejuvenating and anti Bacterial Properties of Gangajal

* * * * *





Kumbh Mela 2019: An Invitation for Diseases and Epidemics

Jeet Singh & Jasleen Kaur

“These scientific studies further reveal that bathing in Ganga at various locations including at Prayag is highly dangerous for public health. Moreover, mass bathing aggravates anti-microbial resistance in human being.”



The government of Uttar Pradesh is organizing ‘Kumbh Mela- 2019’ from January 15 to March 31, 2019 at Prayag (Allahabad).

During this mela, millions of pilgrims/devotee from all across the world will gather in Prayag to bathe in the sacred

river Ganga. Various studies and official figures of Central Pollution Control Board (CPCB) have observed water of Ganga is highly polluted in Prayag. These scientific studies further reveal that bathing in Ganga at various locations including at Prayag is highly dangerous for public health. Moreover, mass bathing aggravates anti-microbial resistance in human being. In other words, the up-coming Kumbh in Prayag will risk public health if it remains uncleaned.





Pollution Level in the Ganga

The Central Pollution Control Board (CPCB) has been monitoring water quality at various stations across the Ganga. It monitors DO (Dissolved Oxygen), BOD

(Biological Oxygen Demand) and total Coliform. These parameters are basic indicators to assess quality of water of any water body. According to CPCB standards, the permissible level of DO, BOD and Coliform is as follows:

Permissible Water Quality for Drinking and Bathing

Purpose	Tolerance limit
Drinking water source without convention treatment	Total Coliforms – 50 or less MPN/100 ml or less DO – 6mg/l or more BOD – 2mg/l or less
Outdoor bathing	Total Coliforms – 500 or less MPN/100ml or less DO- 5MG/l or more BOD- 3mg/l or less

Source: UPPCB

Dissolved Oxygen (DO) levels, Biological Oxygen Demand (BOD) levels, and Total Coliform levels are mentioned in the table below, for the year 2016, 2017 and 2018 as given in the UPPCB website for the water quality monitoring station no. 1046 (Allahabad Upstream).

Water quality data reveals that the Ganga has been unfit for drinking and bathing at Allahabad especially from January to March. The average of DO, BOD and Total Coliform level in Ganga at Allahabad for the month of January to March in last three years is given in the table below.

Water Quality of Allahabad Upstream

Year	Month	DO (mg/l)	BOD (mg/l)	Total Coliform (MPN/100ml)
2016	January	8.1	4	35000
	February	8.6	4.1	40000
	March	8.5	4	41000
2017	January	8.5	4	39000
	February	8.8	3.7	40000
	March	8.7	3.9	43000
2018	January	10.1	4.8	27000
	February	9.5	4.1	28000
	March	9.4	4	31000

Source: Compiled from UPPCB

Average of the values of the months of January, February and March of the respective year

Year (avg)	DO (avg) (mg/litre)	BOD (avg) (mg/litre)	Total Coliform (avg) (MNP/100ml)
2016	8.4	4.03	38667
2017	8.67	3.87	40667
2018	9.67	4.3	28667

Source: Compiled from UPPCB Data

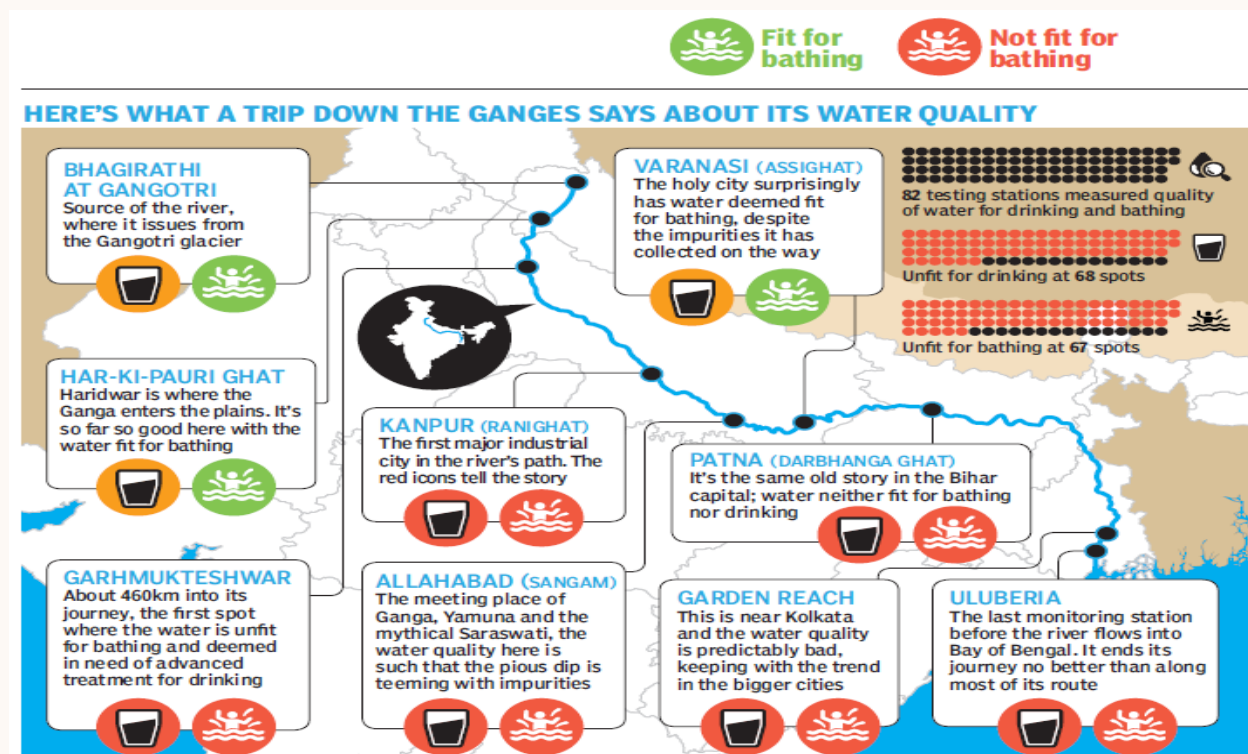




The table above clearly shows that the in last three years in the month of January to March, Ganga water at Allahabad remain highly polluted and unfit for drinking and bathing. The DO level was within permissible limit but the concentration of BOD and Total Coliform level was very high which makes the water unfit for drinking and bathing.

The union minister Mr. Nitin Gadgari recently stated that Ganga will be cleaned to ensure

safe bathing during Kumbh Mela-2019. However, according to latest monthly data (Month September 2018) published by CPCB for 80 monitoring station across the Ganga 68 spots are unfit for drinking and 67 spots are unfit for bathing. It shows that Ganga at Allahabad is neither fit for bathing nor for drinking. (see graphics below)



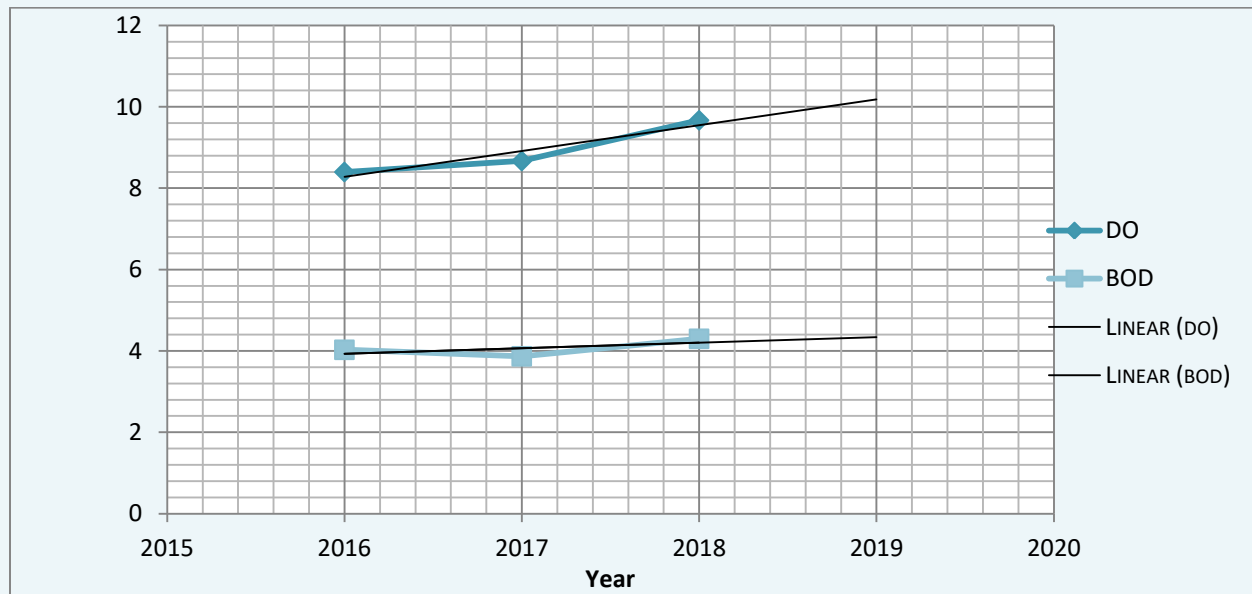
Source: Times of India





On plotting average values of DO, BOD and Total Coliform on a graph and extrapolating or projecting these for the same period in 2019 (Average between January- March), the values are:

1. DO: 10.185 mg/l
2. BOD: 4.337 mg/l
3. Total Coliform: 26000.33 MPN/100ml



Source: Compiled from CPCB data

The projection of average of BOD and total coliform for January to March 2019 suggests that it will remain unfit for bathing and drinking (see graph above).

The NGT in the case M.C. Mehta Vs Union of India & ors on October 6, 2018 observed that despite tall promises and claims by governments, the water of Ganga remain unhealthy. Its order observed, “there was high concentration of chromium in the sewage reaching the CETPs which was a major pollutant. The Common Chromium Recovery Systems (CCRS) was not adequate. It also observed that Discharging untreated effluent in violation of standard have to be

prepared or punished. Ne lenience can be showed to the polluter harming public health.”

Overall, it can be concluded that the Ganga at Allahabad will remain polluted and unfit for drinking and bathing during Kumbh Mela-2019. Further, allowing millions of people to take dip in Ganga will adversely affect their health and well-being.





Public Health Risks of Kumbh 2019

The permissible limit of total coliform in water for bathing is 500 MPN/100 ml. However, the data for the period Jan-March in last three consecutive years shows that the level of total coliforms was excessively high compared to permissible level. Coliforms are indicators of possible presence of pathogenic (disease causing) bacteria, viruses and protozoa. This can possibly lead to outbreak of diseases like cholera, diarrhea, and even poses threat of anti microbial resistance.

A latest study conducted by Department of Biotechnology (DBT), Gol, entitled, "Scoping Report on Anti Microbial Resistance in India, November 2017," it is clearly mentioned that, *"one of the major cultural activities associated with potential acquisition and spread of antibiotic-resistant bacteria is mass bathing in rivers as part of religious mass gathering occasions¹."*

In another study published in Microbial Ecology in 2018 on public health impacts of Godavari Kumbh in 2015 reveals similar issues. The study titled, 'World's Largest Mass Bathing Event Influences the Bacterial Communities of Godavari, a Holy River of India', notes that; *"...estimations suggested nearly 130-fold increase in bacterial load during the event. Bayesian mixing model accounted the source of enormous incorporation of bacterial load of*

human origin. Further, metagenomic imputations depicted increase in virulence and antibiotic resistance genes during the Mass Gathering Events. These observations suggest the striking impact of the mass bathing on river ecosystem²."

The study further noted that the subsequent increase in infectious diseases and drug-resistant microbes pose a critical public health concern. The study also noted that, "a majority of these bacteria contained genes that confer resistance to beta-lactams, folate, antimicrobial peptide, and vancomycin which might pose serious threats to public health in the long run."

Recognizing the public health risk, the National Green Tribunal in the case M.C. Mehta Vs Union of India & Ors on July 27, 2018 directed government of Uttar Pradesh to adequately inform pilgrims of health risk of taking bath in the Ganga. The order reads:

"Large population of this country drinks holy water out of reverence. They also take dip in the River Ganga at several locations. While constant efforts has to be made to improve the water quality, one cannot run away from the reality and if on account of polluted water there are adverse effects on the health of the persons consuming the water or taking dip in the said water, it is the duty of the State to warn the citizens against such danger".





Suggested Pre-requisites for Healthy Kumbh

A scientific assessment conducted by WWF for 2013 Ardh Kumbh Mela in Allahabad recommended minimum flow (E-Flow) in the river at Sangam in Prayag³. For the purpose of ecological friendly and healthy Kumbh, the report recommended e-flow during Ardh Kumbh Mela- 2013 as follows:

Occasion	Average Depth of the river required	Average Velocity required	Estimated Water Flow required
Throughout Ardh Kumbh 2013	1.2 meter	0.4 to 0.5 m/s	225 cumecs (7950 cusecs)
During Special Snan days	1.5 meter	0.4 to 0.6 m/s	310 cumecs (10950 cusecs)

The report argued that the minimum flow suggested in the report must be non-negotiable in order to meet social, cultural aspirations and ecological requirements. The recommended flow in the river estimated with assumption that untreated and privately treated wastewater discharge are stopped from entering the Ganga. It further concludes that without using water from water reservoirs the e-flow cannot be maintained for this purpose. However, re-allocation of water stored in major reservoirs in the Ganga basin will affect agricultural activities.

Conclusion and Way forward

The Constitution of India provides for Right to Life under Article 21 "Protection of life and Personal Liberty". It is also guaranteed under human rights jurisprudence, the Universal Declaration of Human Rights of 1948, the International Covenant on Civil and Political Rights of 1968. The scope of

Article 21 has been expanded by the Indian judiciary to also include Right to Wholesome Environment as seen in cases like *Chhetriya Mukti Sangharsh Samiti v State of UP*⁴ and *Subhash Kumar v State of Bihar*⁵.

Further, the preventive and promotional health care system is the core of the national health policy-2017 approved by the government of India⁶. It envisages as its goal the attainment of highest possible level of health and wellbeing for all at all ages, through preventive and promotive health care orientation in all policies.

Clause 21 of the National Health Policy 2017 also raises concerns related to the problem of anti-microbial resistance. It envisages pharmacovigilance in the hospital and community to address increasing threat of anti-microbial resistance.





Policy framework that we have in place does not allow government to sponsor mass bathing in highly polluted Ganga water. Therefore, organizing Kumbh Mela 2019 at Prayagraj violates fundamental right of life provided under Article 21 of the constitution and various provisions of National Health Policy-2017. Therefore, in order to respect cultural, religious and spiritual aspiration of people and ensure

fundamental right of life and environment the government must ensure clean water, adequate environmental flow and velocity of water at Prayagraj suggested by various scientific studies including study conducted by WWF in 2013 for Kumbh Mela 2019.

End notes

¹<http://www.dbtindia.nic.in/wp-content/uploads/ScopingreportonAntimicrobialresistanceinIndia.pdf>

²<https://link.springer.com/article/10.1007%2Fs00248-018-1169-1>

³<http://www.indiaenvironmentportal.org.in/files/file/environmental%20flows%20for%20kumbh%202013.pdf>

⁴AIR 1990 SC2060

⁵AIR 1991 SC 420

⁶<http://cdsco.nic.in/writereaddata/National-Health-Policy.pdf>

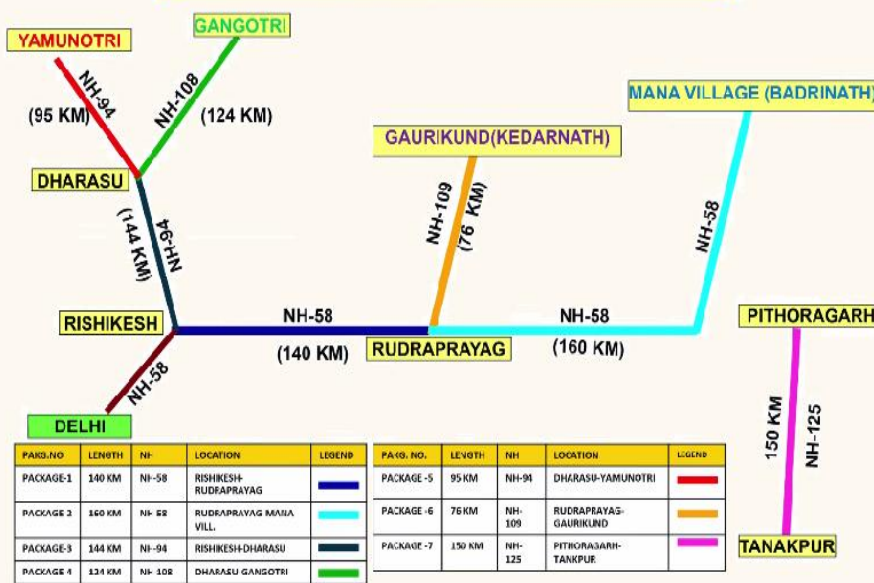




आरामदायक राजमार्ग के लिए कई नदियों का बलिदान

जीत सिंह

Seven Project Roads: Line Diagram



"वर्ष 2020 तक तैयार होने वाली चार धाम महामार्ग परियोजना में लगभग 12,000 करोड़ रुपये की लागत से अंधाधुंध पर्यावरणीय क्षति होगी जिसका सीधा असर स्थानीय वनस्पति, पर्यावरण एवं नदियों पर पड़ेगा।"

चारधाम महामार्ग परियोजना

यमुना, गंगा तथा उसकी मुख्य सहायक नदियों जैसे अलकनंदा एवं मंदाकिनी के किनारे लगभग 900 किमी लंबी सड़क के चौड़ीकरण की महत्वकांक्षी चार धाम महामार्ग विकास परियोजना के कार्य पर एक बार फिर विराम लगा गया है। इस बार उच्चतम न्यायालय ने इस परियोजना को हरी झंडी देने वाली राष्ट्रीय हरित प्राधिकरण (एन0जी0टी0) की प्रक्रिया में विसंगती को देखते हुए यह निर्णय लिया है। उच्चतम न्यायालय ने आदेश दिया कि एन0जी0टी0 को पूर्व में उच्चतम न्यायालय द्वारा दी गई व्यवस्था के अंतर्गत ही केस की सुनवाई करे।

भारत सरकार की महत्वकांक्षी योजना चार धाम महामार्ग विकास परियोजना शुरू से ही विवादों के घेरे में रहा है। दिसम्बर 2016 में इस परियोजना की नींव रखते हुए प्रधानमंत्री नरेन्द्र मोदी ने कहा कि यह परियोजना चारधाम के तीर्थ यात्रियों को सुगम, सुरक्षित एवं त्वरित यात्रा प्रदान करने में कारगर सिद्ध होगा। इस परियोजना के तहत गंगोत्री, यमनोत्री, बद्रीनाथ एवं केदारनाथ को जोड़ने वाले राष्ट्रीय राजमार्गों का चौड़ा किया जाना है। वर्ष 2020 तक तैयार होने वाली इस परियोजना में लगभग 12,000 करोड़ रुपये की लागत से अंधाधुंध पर्यावरणीय क्षति होगी जिसका सीधा असर स्थानीय वनस्पति, पर्यावरण एवं नदियों पर पड़ेगा।





देहरादून में स्थिति सामाजिक संस्था 'सिटीजन्स फॉर ग्रीन टून' एवं कई अन्य सजग नागरिकों ने भारत सरकार पर इस परियोजना को हड़बड़ी में लागू करने तथा पर्यावरणीय प्रभाव का आंकलन किये बिना अवेध रूप से परियोजना का कार्य शुरू करने का आरोप लगाया है।

पूर्व में उत्तराखण्ड उच्च न्यायालय ने भी परियोजना के चलते, होने वाले पर्यावरणीय नुकासन को ध्यान में रखते हुए सड़क चौड़ीकरण के कार्य को स्थगित करने का आदेश दिया था। हालांकि एन0जी0टी0 ने 26 सितम्बर 2018 को इस परियोजना के संचालन की अनुमति दे दी थी।

समय-समय पर न्यायालय के हस्तक्षेप के बावजूद भी इस परियोजना पर युद्धस्तर पर निर्माण कार्य हो रहा है, जिससे पर्यावरण को अपूरणीय क्षति हुई है। कार्य बद्स्तूर जारी रहने की दशा में यह क्षति कई गुना और बढ़ेगी।



Source:- Hindustan Times





परियोजना के पर्यावरणीय नुकसान

नदियों के किनारे की वनस्पति एवं पेड़-पौधे नदी की अविरलता को बनाये रखने के लिए महत्वपूर्ण है। इस तरह से नदी और उसके किनारों के आस-पास की जैवविविधता एक दूसरे की सहयोगी होती हैं। हालांकि एक खबर के अनुसार इस परियोजना से अभी तक उत्तराखण्ड की प्रमुख नदियों के किनारे के लगभग 33 हजार बड़े पेड़ काटे जा चुके हैं। इन आंकड़ों में छोटे और कम व्यास वाले पेड़ों व अन्य वनस्पतियों की गिनती नहीं है।



Source:- www.sandrp.in/



Source:- Road: Economy, Ecology & People

सड़कों को चौड़ा करने के लिए बड़े स्तर पर पहाड़ों को काटा जा रहा है। इन पहाड़ों से निकलने वाले मलवे की डंपिंग की कोई विशेष व्यवस्था न होने के कारण अक्सर मलवे को नदी में फेंका जा रहा है। यही नहीं छोटे-बड़े मौसमी नालों व पानी के श्रोतों के आस-पास भी मलवे को डंप किया जा रहा है। मलवे का यह विवेकहीन निस्तारण नदियों और अन्य पानी के श्रोतों के प्रवाह को सीधा नुकसान पहुंचा रहा है, जो बरसाती दिनों में आपदा को न्यौता देगा।





जून 2013 में उत्तराखण्ड के केदारघाटी में आये विनाशकारी बाढ़ को दशकों बाद तक भुल पाना मुश्किल है, जिसमें एक अनुमान के अनुसार लगभग 600 लोग मारे गये थे। इस बाढ़ में तमाम प्रकार के निर्माण कार्यों से अस्थिर हुए पहाड़ों ने तांडव मचाया था। लेकिन इस घटना को शायद नजरअंदाज कर दिया गया और लगभग पूरे उत्तराखण्ड में एक बार फिर पहाड़ों को अस्थिर करने के लिए यह परियोजना शुरू कर दी है।

क्षेत्र के आस-पास के गांवों के लोगों को भी भारी नुकसान पहुंचा है। मलवे ने उनके जंगल, खेत तथा चारागाह को भी भारी छति पहुंचाई है। इसके अलावा सड़क किनारे छोटी-मोटी दुकान चला कर आजीविका चलाने वाले स्थानीय लोगों को भी हटाया जा रहा है, जिसका सीधा असर उनकी आजीविका पर पड़ रहा है।



Source:- Road: Economy, Ecology & People

To watch video, click [here](#)

पर्यावरण विशेषज्ञों का कहना है कि परियोजना के पर्यावरणीय प्रभाव का अंकालन किया जाना जरूरी है ताकि इस परियोजना

से होने वाले नुकसान को व्यवस्थित तरीके से कम किया जा सके।





Self Rejuvenating and anti Bacterial Properties of Gangajal

Jasleen Kaur


The water of the Ganga or *Gangajal* is known for its anti bacterial and medicinal properties. Even if stored for days, it never decays or rots.

The veteran Environmentalist G.D. Agarwal or Swami Sanand, as he was popularly called, referred to these qualities which have been confirmed in various scientific studies, one of them being conducted under his own guidance at IIT Kanpur. On the basis of this, he wanted the government to strengthen its efforts and resolve towards Ganga rejuvenation and conservation of the unique properties of the river.

Let us see some of the major studies and their findings about the special characteristics of the Ganga water.

Source: www.theartofyoga.org



Ganga water is a bacteria killer

Source: Times of India

Bacteriophage	Bacteria it feeds on
☉ Salmonella phage STML-198	☉ Salmonella which causes Vibrio which causes cholera
☉ Vibrio phage VP58.5	☉ Vibrio which causes cholera
☉ Shigella phage SfIV	☉ Shigella which causes dysentery
☉ Enterococcus phage EFDG1	☉ Enterobacteria which causes urinary tract infection
☉ Cronobacter phage ENT47670	☉ Cronobacter causing meningitis

Bacteriophages are viruses that infect and propagate in bacteria killing them. Therefore these are antibacterial in nature and are a cause for the anti bacterial properties of the Ganga water. The role of bacteriophages and their diversity in the river water was explored in detail by a 2016 CSIR-NEERI study. It notes, "This study revealed variety of different phages that are reported to have specific bactericidal activity against clinical isolates and pathogens like Mycobacterium, Pseudomonas, Salmonella, Staphylococcus, Klebsiella, Clostridium."

Unveiling the mystery of healing

The first mention of the anti bacterial properties of the river water was found in 1890s study by a British Bacteriologist, Earnest Hankin. Hankin through his study proved that 'the cholera bacteria, *Vibrio cholerae* could not survive in Ganga water for few hours while it could survive in distilled water for about two days'. Hankin concluded that although these properties were present even in filtered water, they were destroyed on boiling. It paved way for further 1915 research by Felix d' Herelle who traced these anti bacterial properties to the action of bacteriophages present in the river

water.

Self Rejuvenation Properties of the Ganga

Besides the studies conducted on bacteriophages as a cause for river's healing properties, scientific work has also been done on river's capacity to rapidly rejuvenate itself. In this regard, a mention must be made of the work done by Dr. D.S. Bhargava during 1980s. In his 1983 study, Dr. Bhargava explained why the Ganga water never putrefies. Putrefaction or rotting of water occurs when Dissolved Oxygen (DO) levels reduce in the water. DO level is the measure of oxygen dissolved in the water available for decomposition of organic waste by bacteria. However, the water samples from the



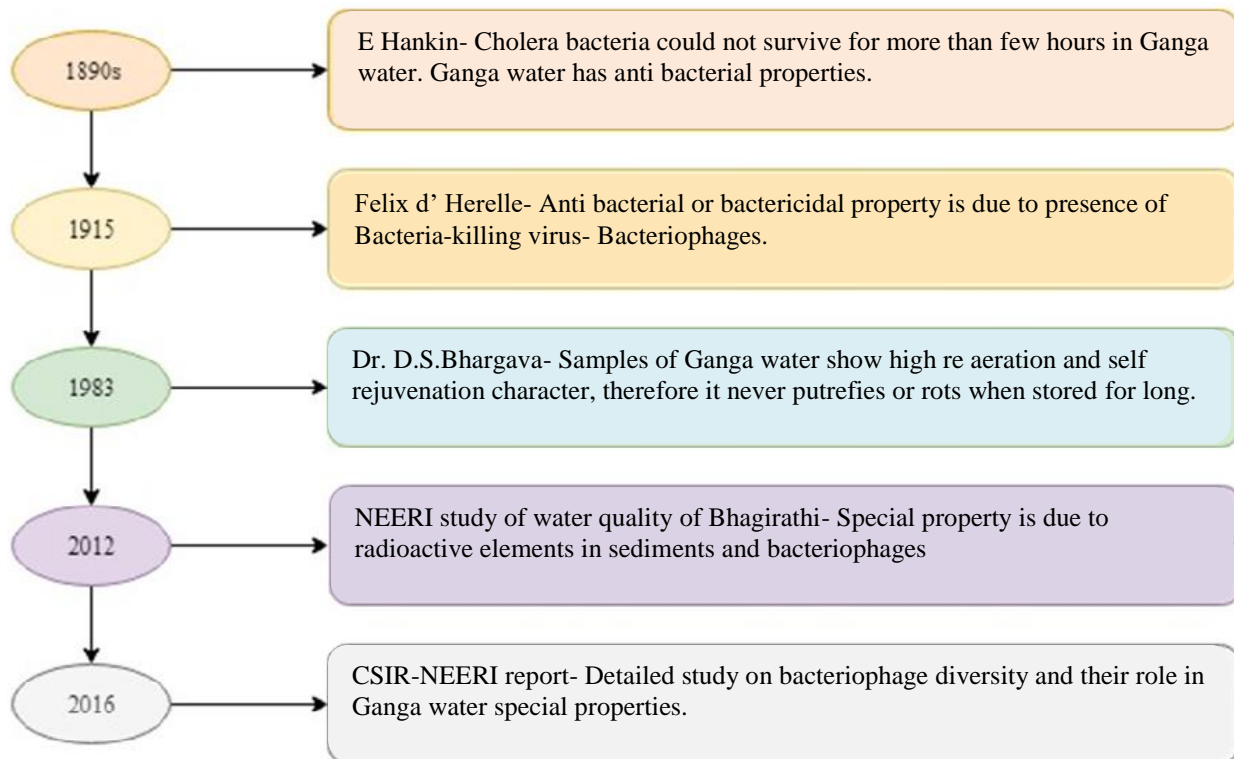


Ganga exhibited extremely fast re aeration capability and it was able to quickly raise the dissolved oxygen levels in the water. Therefore it shows no putrefaction or rotting even after being stored for a long time. Dr. Bhargava considered it to be due to presence of some volatile sediment in the river.

While some reports attribute the unique characters of the river to bacteriophages, some

consider it to be due to the medicinal plants present along the path that the river traverses in the hills, or the presence of sediments and minerals that the river carries. One such report was prepared by NEERI to investigate the impact of Tehri dam on the water quality of the Ganga. The report concluded that “the water of the Bhagirathi owes its special powers to its radioactive sediment content, and to the coli phages.”

Timeline of some studies and reports on the Ganga Water Properties





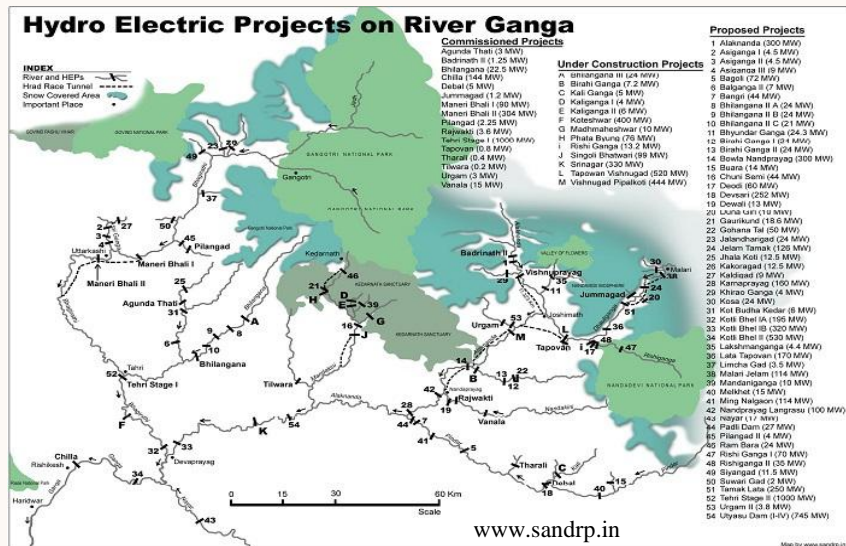
Failing to heal the healer

After having seen the scientific evidence as cited in several reports and studies, it can be accepted that the Ganga water has special characteristics. However, despite possessing the self rejuvenating, anti bacterial and healing properties, the river today itself is heavily polluted. This is evident from a 2018 Central Pollution Control Board (CPCB) data, according to which only 14 out of 82 monitoring stations had water that was fit for drinking. This raises a question, “what threatens the resilience of the river?” The answer includes several reasons including huge volumes of sewage disposal, industrial and chemical effluents. Yet one major reason is damming of the river.

In the name of development, the river has been heavily dammed, especially along its upper stretches. It is a well known fact that dams and reservoirs result in complex changes in degradation below the dam and change in water sedimentation (settling down of sediments in water). This necessarily impacts the water properties. In fact the NEERI report on the Tehri dam also stressed on the need to have a certain level of

suspended solid downstream of Tehri.

Understanding these concerns, various organizations, experts and environmentalists like Swami Sanand have made demands and advices but these have been constantly ignored by the government and its agencies. The Ganga is a National heritage. Its rejuvenation must therefore evolve from a process of inclusive decision making involving inputs from civil society, scientists and experts. Swami Sanand may have left us, but his vision is alive and is helping the Ganga warriors to continue their fight towards achieving an *unpolluted, uninterrupted* flow for the River.



Rajiv Gandhi Institute for Contemporary Studies
Jawahar Bhawan, Dr. Rajendra Prasad Road, New Delhi-I 10 001 (India)
 Phone: +91-11-23312456, 23755117/118 E mail: info@rgics.org Website: www.rgics.org

Disclaimer:

This document has been prepared by the RGICS staff and has not been seen by the Trustees of the Rajiv Gandhi Foundation (RGF). Further, the views presented in this document in no way reflect the views of the RGF Trustees.

