

# The People, Piety, Pollution and Politics of Ganga

## Happenings surrounding our 'National' River

One of the most striking descriptions of this remarkable phenomenon called *the Ganga* comes from Jawaharlal Nehru: "The Ganga, especially, is the river of India beloved of her people, round which are intertwined her memories, her hopes and her fears, her songs of triumph, her victories and her defeats. She has been a symbol of India's age long culture and civilization, ever-changing, ever flowing and yet ever the same Ganga".

The dimensions are huge: 2526 km long river is India's longest one. The river basin is among the world's top twenty big rivers with area of over a million sq km. In terms of number of people staying in the basin, it is the world's biggest with 448.3 million people (2001 census), likely to be over 529 million (in 2011, assuming Ganga basin population growth rate same as national rate, which will give only a conservative estimate) staying in the Indian part of the basin (79.3% of total basin area in India). The basin area includes parts of four countries, and within India 11 states (Haryana, Himachal Pradesh, Delhi, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, Uttar Pradesh, Uttarakhand, Bihar, W Bengal).

In the Hindu religion, Ganga is an incarnation of the Goddess herself. It figures in the Vedas, the Puranas, the Ramayan and also Mahabharat. Throughout the basin the river is considered holy, as also by millions of Indians staying beyond the basin. Almost every festival and ceremonies of the people and religions in the basin and beyond centre around the river. Culturally too, the river has great significance if we look at the popular literature, films, songs, poetry or the stories.

The website of the [National Ganga River Basin Authority](#) (NGRBA) says, "Ganga drains a basin of extraordinary variation in altitude, climate, land use, flora & fauna, social and cultural life. Ganga has been a cradle of human civilization since time immemorial. Millions depend on this great river for physical and spiritual sustenance. People have immense faith in the powers of healing and regeneration of the Ganga. It is arguably the

most sacred river in the world and is deeply revered by the people of this country. The River plays a vital role in religious ceremonies and rituals. To bathe in Ganga is a lifelong ambition of many who congregate in large numbers for several river centered festivals such as Kumbh Mela and numerous Snan (bath) festivals."

Besides the main stem of the river, most of its tributaries, including Yamuna, Chambal, Damodar, Gomti, Kali, Khan, Kshipra, Hindon, Sone, Kosi, Betwa, Ramganga to name a few, are all described as grossly polluted by the various agencies like the Central Pollution Control Board, the Union Ministry of Environment and Forests and its National River Conservation Directorate and NGRBA.

**Dams and Barrages on Ganga** If one were to travel down the river from Gangotri (the birth place of Bhagirathi, considered the source stream of the

What is a river? Here is a definition we attempted: **River is a hydrological, geomorphic, ecological, biodiversity rich, landscape level system that serves as key part of freshwater cycle, balancing dynamic, though not always continuum (e.g. discontinuity when tributaries meet a river) equilibrium between soil moisture, snowfall, rainfall, surface water and groundwater and providing large number of social, environmental, economic, cultural, aesthetic, religious services to the people and ecosystems all along its watershed.**

Ganga River. The River that was brought to the earth through the cross hairs of Kailash, the Shiva, as per Bhagirath), Yamunotri (the birth place of Yamuna, a river that is bigger than Ganga at their confluence in Allahabad), Kedarnath (the source of Mandakini River) or Badrinath (the source of Alaknanda River) one should be ready to face some rather nasty surprises down the stream.

These would include complete disappearance of the river for several kilometers for most of the time during the year or the

river getting submerged behind a dam. And this disappearance of the river and also submergence of the river would happen again and again for each project. These stretches had perennial rivers before the dams and hydropower projects were built on them. Further down, there are barrages on the river at Haridwar (water diverted to Upper Ganga Canal), Bijnor (Madhya Ganga Canal) and Narora (Lower Ganga Canal), at Kanpur and also the dam at Farakka. In addition, every one of the 17 major tributaries has been dammed several times.

However, in NGRBA's [description of the problem](#), there is no mention of these projects: "In the Ganga basin approximately 12,000 million litres per day (mld) sewage is generated, for which presently there is a treatment capacity of only around 4,000 MLD. Approximately 3000 MLD of sewage is discharged into the main stem of the river Ganga from the Class I & II towns located along the banks, against which treatment capacity of about 1000 MLD has been created till date. The contribution of industrial pollution, volume-wise, is about 20 per cent but due to its toxic and non-biodegradable nature, this has much greater significance."

**The River Action Plans** This polluted state of the river is not an overnight or recent development. The poor state of the river is common knowledge for pretty long now. And the river is not in this state for lack of attempts (at least on paper) and lack of financial or technical or infrastructure resources or lack of understanding as to what are the responsible reasons for the river to be in this state for so long and what needs to be done.

**The 1<sup>st</sup> phase** of tackling the pollution started with the enactment of the Water Pollution Act 1974, through which elaborate institutional arrangements from Central to State Pollution Boards were set up with an army of bureaucrats, buildings and laboratories, armed with significant legal powers. However, till date we do not have a single case of a river or tributary or stream that has been cleaned up due to the effort of any of the pollution control boards. The Pollution Control Boards are known to have become dens of corruption.

Having seen this failure, the then Prime Minister Rajiv Gandhi launched the now celebrated Ganga Action Plan in 1985. Rajiv Gandhi, in his speech announcing Ganga Action Plan on June 14, 1986 at Dohadghat in Varanasi was quite optimistic: "**Today we are beginning the program of cleaning the Ganga here – and it is our hope that through this there will be a sewage plant built and where all the sewage will be diverted – and won't come into the Ganga – we will get power from that also – and we will get fertilizer from it and the power that will be required it will make it itself.**" Rajiv Gandhi was also hopeful that the Environment Protection Act, enacted the same year of

1986, will be useful in this endeavor. The EP Act is good, but the agency implementing it, the Union Environment Ministry did not show the independence, the will, willingness or the intention of taking on this problem with any sense of seriousness.

Moreover, the GAP scheme did not attempt to learn any lessons from the failure of the earlier Pollution Control apparatus then in existence for over a decade when the GAP was launched. The GAP continued on the business as usual emphasis on more sewage treatment plants, pumps, pipes and such infrastructure.

The official consultants to the scheme - the Thames Valley Water Authority of England had never tackled any river that was comparable in size or complexity to any one of the seventeen tributaries of the Ganga, leave aside the whole basin. The World Bank also funded the scheme, but it too had no credible track record of cleaning up any polluted river stretch through any of its projects in India. The Dutch government funded a ten year project to implement parts of the GAP in Kanpur without adequately understanding the nature of the pollutants Kanpur Rivers had and it failed in its design itself. Decades later, the then Union Minister of State of Environment and Forests Jairam Ramesh declared on the floor of the Parliament in 2009 that the GAP and the Yamuna Action Plan had failed to achieve its basic objectives.

In 1993 the **GAP Phase II** was launched, including tributaries of Ganga like the Damodar, Yamuna, Mahananda and Gomati. In

Dec 1996 it was merged with the **National River Action Plan**. The importance of this scheme to government is clear from the fact that the National River Conservation Authority is chaired by the Prime Minister and includes, besides several Union Ministers, Chief Ministers of all the basin states.

There are Standing monitoring and steering committees including the highest bureaucrats from the centre and the states. **While it was apparent over the years that the GAP and the RAPs (River Action Plans) are failures, no credible attempt has at any stage been done to understand the reasons for failure when monitoring supervision was supposed to be from the highest quarters.**

**Throughout almost four decades of attempts at river pollution control, the key decision makers and managers have been the Union and the state governments, through their constituents like the Ministries of Environment and Forests, Water Resources, Urban Development, the Pollution Control Boards, the Water Quality Assessment Authority, Urban Municipalities, etc.**

**But none of these agencies have shown any culture of democratic, transparent, accountable, participatory functioning. Their salaries, livelihoods or life sustaining elements are not dependent whether the rivers are clean, whether they have any freshwater flow or not.**

The CAG has shown through several reports how the scheme has been a failure, the latest report coming in 2011. In the report, echoing what SANDRP had said several years ago, the CAG said that ever since the UPA alliance came to power in 2004, there have been no meetings of either the authority headed by the PM or the Steering committee headed by secretary of Union Environment Ministry. This is just an indication of how low priority the government has for the Rivers in general and Ganga in particular.

**Evolution of NGRBA** In February 2009, incidentally just months before the Parliamentary elections, sensing that issue of dams on and pollution of Ganga is becoming a hot issue, the UPA government came out with a notification on National Ganga River Basin Authority, again headed by the Prime Minister and included some non government members. It was clear at the outset that these were symbolic gestures and within government there was absolutely no serious intent at tackling these issues. Most importantly, like in case of earlier attempts at fresh starts in 1974, 1985, 1993 or 1996, this time too there was no credible attempt to understand the reasons for failure in the past and address the issues related to the governance of the river.

This soon became clear when the non government members had no role in the crucial decisions being taken by the government including decision regarding the USD 1 Billion funding from the World Bank (the same institute that is funding Vishnugad Pipalkoti hydro project on Alaknanda river in Uttarakhand, destroying a long stretch of the river) or specific plans, programmes or schemes. In over three years since the authority was formed, there has been just three meetings (even the agenda and minutes of these meetings are not in public domain!).

Frustrated by this and supporting the fresh fast from Prof G D Agarwal (his earlier series of fasts led to ultimately declaring 135 km stretch of the Bhagirathi as eco sensitive zone, though a bit ominously, the notification for this is yet to be published in the gazette, without which it cannot become a law. On the contrary, some elements within the government took the decision to abandon hydro-projects in this stretch to mean that they can take up even more projects on other tributaries of Ganga), three of the non government members declared their resignation from the authority, but they attended the April 17, 2012 meeting of the authority. This meeting of the NGBRA was *the* concession given by the

government when Prof Agarwal's fast ended in March 2012.

**So where is the problem?** Most importantly, throughout these almost four decades of attempts at river pollution control, the key decision makers and managers have been the Union and the state governments, through their constituents like the Ministries of Environment and Forests, Water Resources, Urban Development, the Pollution Control Boards, the Water Quality Assessment Authority, Urban Municipalities, etc. But none of these agencies have shown any culture of democratic, transparent, accountable, participatory functioning.

Their salaries, livelihoods or life sustaining elements are not dependent whether the rivers are clean, whether they have any freshwater flow or not. **And the people whose livelihoods, life sustaining elements are dependent on these rivers have no, absolutely no role at any level in ensuring that these rivers are clean, flowing all round the year with clear water, the basic slogan of *Nirmal, aviral* Ganga that the Ganga campaign have been raising.**

**In a sense, the religious, cultural connection of the Ganga River has been a bane since it has lead to increase in the pollution load of the river rather than reducing it. Why did they allow the river they revere, to come to this pass? What have they done to reverse it?**

**Can we even hope the river will have better fate or state without making the citizens part of the process? Ultimately, the river is a mirror, or better still, a report card of what you do it its catchment.**

In other words, the emphasis has been solely on **infrastructure** (new plants, pumps, pipes) and **(pocketable) finances**, but none at all in addressing the governance related to any of the component of the river management regime.

It is assumed that more machinery and finances will take care of the problem and there is no need to address the governance to ensure that the infrastructure actually works as intended and decisions are appropriate, the finances are used

optimally and for the right options. A simple indicator of the failure of the governance is that most of the existing Sewage Treatment Plants do not function anywhere close to designed or promised levels with respect of quality or quantity of output and yet, no one knows who is responsible for this, no one has ever been punished.

**So the Ganga Campaign advocates say the river should not be connected to the sewer, but reality today is that the river *is* the sewer.** There has been no credible assessment of the amount of freshwater the river should have all round the year downstream from a dam, hydro project or a barrage, and none is getting released at diversion points, even for perennial rivers. The rivers are allowed to be killed multiple times and it is actually being passed off as an environmentally benign

treatment by no less than the Union Environment Minister Ms Jayanti Natrajan on the floor of the Parliament while answering the debate on Dec 19, 2011 & again in April '12.

**Environmental Flows or Minimum Flows?** Even where the ad hoc-ly decided minimum flows are stipulated, the MEF has no credible compliance mechanism in place and they have refused to involve the local people in ensuring compliance. Leave aside the question of stopping work on ongoing projects on Alaknanda and Mandakini as the Ganga Campaign has demanded, Ms Jayanti Natrajan went out of her way to clear the 300 MW Alaknanda Hydro project of GMR group even after the statutory Forest Advisory Committee twice rejected clearance to the project and the Ministry appointed consultant, the Wildlife Institute of India recommended that the project should not be allowed. This project is close to the Badrinath and Kedarnath sites and also important protected areas like the Nandadevi Biosphere and the Valley of Flowers. It will dry up the river en-route to the shrines, pleading that there are no pilgrims in six months! In fact the Alaknanda basin plans will destroy all the five holy prayags, if the planned schemes go ahead, one of them, the Vishnu *prayag* already stands destroyed due the 400 MW Vishnuprayag hydropower project of JP associates.

The gap between the state of the river now and what the people of India dream of (*Nirmal, aviral*) is only increasing. More troubling is the fact that there is no road map in sight to bridge this distance. One has to remember that in the context of climate change, with glaciers melting, sea levels rising and monsoon patterns becoming unpredictable, the state of the river will only get worse.

One of India's most erudite politicians, Jairam Ramesh, once attempted to strike my name off a list of possible people who can participate in an attempt to solve this riddle. Ramesh said I think Ganga is only a river. Indeed, Ganga is more than a river. **But first and foremost it is a river. With due apologies, sir, but does the government that you represent consider it a river at all? There are no signs of it in anything that this government does concerning the Ganga.**

**What incidentally is a river?** Here is a definition we attempted: River is a hydrological, geomorphic, ecological, biodiversity rich, landscape level system that serves as key part of freshwater cycle, balancing dynamic, though not always continuum (e.g. discontinuity when tributaries meet a river) equilibrium between soil moisture, snowfall, rainfall, surface water and groundwater and providing large number of social, environmental, economic, cultural, aesthetic, religious services to the people and ecosystems all along its watershed.

It is not that the citizens and society are beyond blame. In a sense, the religious, cultural connection of the Ganga River has been a bane since it has lead to increase in the pollution load of the river rather than reducing it. Why did they allow the river they revere, to come to this pass? What have they done to reverse it? And can we even hope the river will have better fate or

state without making the citizens part of the process? Ultimately, the river is a mirror, or better still, a report card of what you do it its catchment.

**17<sup>th</sup> April 2012: The Third NGBRA Meeting** The Prime Minister gave the most disappointing speech (<http://pib.nic.in/newsite/erelease.aspx?relid=82308>) at the 3rd National Ganga River Basin Authority meeting on April 17, 2012. The speech promises nothing, says the most discredited IIT Roorkee report that even the Ministry of Environment and Forests' Expert Appraisal Committee on River Valley Projects criticized and which the EAC does not follow and the report of the Wildlife Institute of India that his environment minister Jayanti Natrajan refuses to follow, will be their guiding lights and a multi

disciplinary group will now study them! In early June 2012, the PM decided that this group will be headed by the Planning Commission member B K Chaturvedi will head it. Mr Chaturvedi has been a sort of trouble shooter for the government whenever it hits any environmental hurdle. Such panel will have no credibility.

PM also has hopes from IIT consortium to provide guidance for future. The Consortium that has no track record on either understanding the complex social, cultural, environmental, economic and governance problems that plague the issues related to the state of the river, not does it have track record of taking independent positions on these politically tough issues.

**All Party MP Forum to PM: Scrap all under construction and planned projects on Ganga. Let at least 50% river flows be protected.**

**"Not a single village in the vicinity of the already existing projects can be termed as developed. Indeed, the villages that were once enriched with perennial water supplies and vast grazing lands are now deprived of both, water and land. Deep cracks in houses and unexplained land sinking has happened at several sites even distant from dams. Information gathered from RTIs reveals that existing hydropower projects are functioning below 40% efficiency and yet new projects are built."**

On the deficit of 18000 MLD treatment capacity of Urban sewage (it is a gross underestimate) the only thing the PM has to offer is MONEY: "There is adequate funding available to create additional treatment facilities under the National Mission Clean Ganga."

On under utilization of existing sewage treatment plants, he suggests that it is basically because lack of connection with the sewage and O&M expenses, so he offers relaxation of norms! Neither of these are really the key problems affecting existing STPs.

On persistently polluting industries, he only has a sermon to state government to strengthen enforcement mechanisms... such sermons have come and gone hundreds of times without any impact...

"...to attend to some of the institutional, administrative and financial problems that may be coming in the way of more effective implementation of pollution control and abatement measures", he asks the states to submit reports on urban and industrial pollution and than NGBRA can consider actions! The PM hints that it is well known what needs to be done, but clearly does not want to do anything...

**And of course not a word on the issue of Dams**, the biggest threat to the river and all the related problems, not a word on addressing the governance issues. PM acknowledges, "We should remember that our efforts in the past have not been very successful" but the only thing on offer is "a renewed and sincere commitment in both thought and action to make a definite change in the situation". Unfortunately, in the entire speech there is nothing at all to suggest that he means what he says.

In the same meeting, **Uttarakhand Chief Minister Vijay Bahuguna** lobbied hard for hydro projects, even those which were already cancelled by the MoEF saying that projects cannot be cancelled for 'perceived feelings of some people'.

In a statement issued after the meeting, Bahuguna disclosed that the State Cabinet had passed a proposal

in support of hydropower projects. He also opposed declaration of 135-km-long area between Gomukh and Uttarkashi as an eco-sensitive zone, exhorting that current regulations were sufficient to regulate development in the area. ([The Outlook](#) 190412)

### **22 May 2012: More than 30 MPs all parties urge the PM to allocate 50% water from existing Ganga Dams and scrap on-going and planned projects on Alaknanda & Bhagirathi**

On the 22<sup>nd</sup> May 2012, more than 30 Members of Parliament representing various political parties met the Prime Minister and gave him an appeal on behalf of India Parliamentarian Forum for Saving Ganga and Himalayas. This also included MPs from Uttarakhand, a state government that is seemingly hell bent on building more than 500 dams on the Ganga and its tributaries.

The submission and the subsequent meeting is important in many ways, it highlights the fact that Aviral Dhara in Ganga is a demand that is not restricted to one

particular religion, or political party, but is echoed by a wide population.

The submission states that the existing projects on Ganga: Maneri Bhali I, Maneri Bhali II, Tehri and Koteshwar have shown massive negative impacts. Due to these projects, 115 kilometers of the river from Maneri Bhali to Koteshwar has been reduced to a series of tunnels and reservoirs and original Ganga has disappeared. The projects under construction and under consideration are planned "bumper to bumper all along the path of the river".

Interestingly, it says: "Not a single village in the vicinity of the already existing projects can be termed as developed. Indeed, the villages that were once enriched with perennial water supplies and vast

grazing lands are now deprived of both, water and land. Deep cracks in houses and unexplained land sinking has happened at several sites even distant from dams. Information gathered from RTIs reveals that existing hydropower projects are functioning below 40% efficiency and yet new projects are built."

Let us hope that the government takes these demands seriously. The local population suffers the impacts and loses livelihoods to the hydroelectric projects. All the

#### **Demands of all party MPs**

- **Immediate scrapping of all under construction projects on Mandakini (Rambada, Phata Byung, Singoli-Bhatwari on Mandakini) that have already been noticed as detrimental and have been proposed for cancellation but not executed.**
- **All proposed HEPs should be cancelled with immediate effect**
- **150 kms of valleys from glacier lines must be declared as Cultural Eco sensitive zone.**
- **50% water must be released from Maneri Bhali 1 and 2, Koteshwar and Tehri for maintaining e-flows.**

**All hydro projects that were scrapped in Gangotri valley last year must be brought to an appropriate closure, sealed and ecology be restored.**

limited profits are made by the contractors, politicians and bureaucrats involved. Hence, the Uttarakhand Government's role, heavily pushing hydropower needs to be looked at as a limited, motivated perspective.

### How many dams are planned on the Ganga?

Although the government appointed two consultants to study the Cumulative Impacts of dams in Alaknanda and Bhagirathi Basins, these consultants could not even arrive at one figure on the number of dams planned, under construction and operating. While WII Reports pegs this number at a mere 70 (a gross underestimate), the IIT R AHEC Report claims that total dams are 330. However, an RTI filed by water activist Bharat Jhunjunwala in 2010 revealed that the Uttarakhand government planned to construct 557 dams across the Ganga and its tributaries. The website of the Uttarakhand Jal Vidyut Nigam Ltd (UJVNL) reveals plans to construct 290 dams. According to Dr Ravi Chopra, Director of the Dehra Dun-based People's Science Institute, one hundred and thirteen dams are common in both lists while another 117 dams that were in the pipeline had not been listed in the RTI. **While 56 dams were cancelled, the current number is still a very staggering 680!** ([The Asian Age](#) 300512)

### 01 June 2012: MoEF looking for "legalities" to ensure more flow

In a news report, Minister Jayanti Natarajan claimed that the Ministry is looking at ways through which capacity of existing hydro power projects can be reduced. To quote, "We are seeing if a way can be found under the EPA to impose conditions post-facto on hydro power projects, given that the Ganga is National River, and free flow is an environmental issue." ([The Hindu](#) 010612)

This is indeed ironic. In past so many years, the Ministry has refused to be proactive, or even active about its role in releasing e-flows through dams. In the Upper Ganga itself, the EAC of the MoEF is haggling with the private project proponent and is bowing down to their demands of e-flows (see: [http://sandrp.in/drp/DRP\\_Jan\\_Feb\\_2012.pdf](http://sandrp.in/drp/DRP_Jan_Feb_2012.pdf), P 22). It is taking no action against projects which are not releasing even the stipulated, very low eflows, like the Vishnuprayag HEP. Nor is it accepting recommendations of WII on eflows and scrapping of HEPs.

**Even now, after nearly a year, the Ministry has not gazetted the notification for protecting the first mere 135 kilometers of the Bhagirathi from Gangotri to Uttarkashi, as the MoEF and the Prime Minister had promised in 2010. The Notification itself states that this is in line with Section 3 (2) of the Environment Pollution Act.**

In many instances, like in the case of Himachal Pradesh, committees, local communities and civil society organizations have been saying that e-flows releases are not being implemented. But the ministry is not taking any action on these issues. In case of the 1750 MW Demwe Lower Project in Arunachal, it was pointed out by a

number of experts and stakeholders that in view of the large fluctuations caused by the upstream dam, the project would need to get permission of the Chief Wildlife Warden Assam, for the downstream Dibru Saikhowa National Park, under 35 (6) of Wildlife Protection Act. But this legal provision was conspicuously overlooked. (For details:

[http://sandrp.in/dams/Wildlife\\_Clearance\\_for\\_Lower\\_Demwe\\_will\\_be\\_disastrous\\_for\\_Biodiversity](http://sandrp.in/dams/Wildlife_Clearance_for_Lower_Demwe_will_be_disastrous_for_Biodiversity))

On June 22, 2012, some anti social elements attacked the person and residence of Dr Bharat Jhunjunwala at Devprayag. We condemn this most shocking incident. We understand from reports that the attackers were backed by the company building the 330 Srinagar hydropower project on Alaknanda River. We also gather from reports that the police knew about the possibility of such an attack and in fact disappeared from the scene to make such an attack possible. This is most shocking.

In a letter to the Uttarakhand Chief Minister Shri Vijay Bahuguna on June 23, 2012, we wrote, "We immediately demand strictest action against those responsible for this act, including those from the company and their contractors. PI also set up a credible enquiry to ascertain the role of the police. We also would like you to ensure that such incidents are not repeated as they are against the basic democratic and constitutional norms." Earlier on June 22, Dr GD Agarwal, Rajendra Singh and others were arrested by the Police when they were on a visit to the under construction Srinagar hydropower project and taken out of Uttarakhand. This too is condemned.

All in all the past and current situation raises doubts about Ministry's seriousness about making the Ganga either Aviral or Nirmal.

**Himanshu Thakkar** (An edited version of this appeared in *Civil Society* issue of June 2012)