

## WATER QUALITY

# Bridging the Ganga Action Plan

## Monitoring Failure at Kanpur

*This article analyses the implementation of the Ganga Action Plan and the various reasons for its failure in the highly polluted villages of Jajmau, clustered near Kanpur city.*

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This case concerns one of the most polluted stretches of the river Ganga – specifically the 22 km that falls within the Kanpur city limits. The city covers an area of 1,040 sq km of which the municipal area comprises 672.56 sq km. Nestled on the banks of the Ganga, Kanpur is one of north India's major industrial centres that has considerable historical, religious and commercial importance. Leather industries (LI) are located in Jajmau, the oldest part of the city. The geographical area under study is a cluster of villages on the eastern limits of the city, two kilometres from Jajmau (henceforth referred to as Jajmau villages). These villages fall within the municipal limits of the city and some of them are situated on the river bank.

Prior to the implementation of the Ganga Action Plan (GAP) in 1986, the Jajmau villages were being supplied with untreated city sewage mixed with Ganga water (in

a 50:50 ratio) for irrigation. This area used to be subject to the vagaries of rainfall because it was not connected with any of the various canal networks in the region. However, with the introduction of wastewater irrigation, the villages prospered and became known for their dairies and floriculture. With the introduction of GAP in Kanpur, there was a change in the arrangement; a mix of sewage and tannery effluent was supplied for irrigation after being treated, but without being mixed with Ganga water. This arrangement, ostensibly better because the sewage was treated, is alleged to have completely destroyed agriculture and other means of livelihood in the villages: flower cultivation has declined drastically, groundwater is polluted, stomach- and skin-related diseases are reportedly on the rise, as are cattle diseases, and there are fears that poisonous metals and chemicals have entered the food chain. The villagers claim that this is because both the treatment plants – sewage treatment plants (STPs) and

Common Effluent Treatment Plant (CETP) – have failed to treat waste adequately.

Various conflicts are involved here: between the Jajmau villages and the UP Jal Nigam (UPJN) which is responsible for operation and maintenance (O&M) of GAP installations; between the LIs and the UP Jal Nigam and the UP Pollution Control Board (UPPCB); and indirectly between the villages and the LIs. This is apart from the other dispute that involves the villagers and Kanpur Nagar Nigam (KNN), the agency responsible for collecting irrigation cess from the villagers.

## Ball Is in the Court

The problem is that the growth of tanneries has not been matched by an increase in the capacity of the effluent treatment plant. Of the 220 chrome tanning units in Kanpur, 110 were supposed to install their own chrome recovering plants (CRP), but only 88 have done so until now. And, only a few of them actually operate these units since the running costs are high. Although the proposal to set up a common CRP (CCRP for the smaller units that tan less than 50 hides) has been approved by the National River Conservation Directorate (NRCD) and the funds sanctioned, the scheme is not in place yet. Therefore, chromium (and other chemicals) still finds its way into the irrigation channels and the fields. The National Botanical Research Institute (NBRI) has been carrying out a study on the decontamination of chromium from the Upflow Anaerobic Sludge Blanket (UASB) treated tannery effluent and contaminated soil in the area adjoining Jajmau by using phytoremediation techniques. Some efforts are being made to improve the life of people at the affected villages. The villages are being electrified, roads are being constructed, work on a half finished tube well at Atwan village has resumed and the tube well in Sheikhpur village is already in operation.<sup>1</sup> These are deep tube-wells that provide safe drinking water.

However, all this happened only after the court's intervention. A public interest litigation (PIL) was filed in the Allahabad High Court (HC) in 1997 (R K Jaiswal vs State of UP and Others) that passed several directives from June 1997 to October 1998. Though the court's involvement significantly improved the situation initially, sustained effort on the part of the authorities has been lacking. For instance, the court ordered that there should be uninterrupted

supply of electricity for important installations in GAP, but the diesel generation (DG) sets at these sites were not provided with sufficient diesel for running when there is a power breakdown.

In October 1998 the Allahabad High Court passed an order that stayed the implementation of GAP II till a technical committee nominated by the court was formed (the court also directed the central government to provide funds for the creation of a River Police Force). The government of India, through the ministry of environment and forests (MoEF) moved a special leave petition against this order and obtained a stay on it from the Supreme Court (SC). Later, the Sankat Mochan Foundation of Benaras,<sup>2</sup> through two corporators, also intervened in the case in the SC. The SC sent the case back to HC where it is still pending.

The government eventually agreed to dump the poisonous tannery sludge in a landfill at Rooma village. The high court directed the KNN to ensure safe disposal of the waste from the UASB plant, but it continues to be dumped near the villages from where it is later collected and taken to Rooma. But even at Rooma work on the preparation of the landfill is yet to begin. Meanwhile, the dried sludge – all of which is toxic – is sometimes also used by the UPJN to fill breaches in its canal!

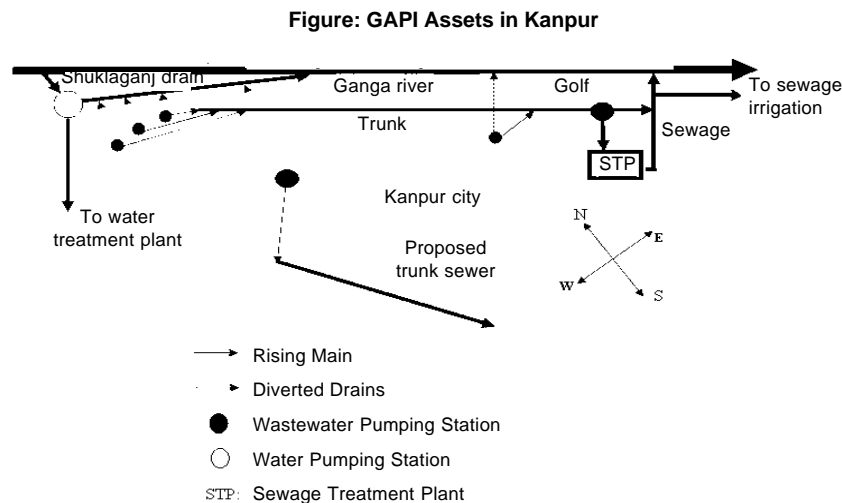
The villagers have refused to pay the irrigation cess and the KNN seems to have surrendered. For the mayor and the corporators, the real problem is the media's persistent interest in the case and the pressure exerted by civil society organisations. Politicians and bureaucrats too visit the villages off and on.

### Tracing the Conflict

(1) The Allahabad High Court reacted to the PIL lodged in 1997. Its directives forced the government to take action and instilled a sense of urgency into its efforts to resolve the problem.

(2) In the beginning of 2000, Eco Friends (For details on Eco Friends visit <http://www.ecofriends.org>) mobilised the Jajmau villagers and several protest demonstrations, sit-ins, gheraos (of mayor) and other campaigns were organised. Memorandums listing the villagers' demands were submitted to the authorities. The media highlighted the issue, and the NGO wrote letters and sent reports to relevant parties.

(3) An important meeting of all concerned individuals took place in the beginning of



2000 when the installation of CRP was made mandatory. The chairman, Central Pollution Control Board (CPCB), the director, Central Leather Research Institute (CLRI), a National River Conservation Directorate representative, environment secretary, UP government, some officials from the industries department, representatives from all the tannery associations and Eco Friends attended the meeting. Prior to this, the additional secretary/project director of the NRCD and secretaries of various departments, including the chief secretary, UP, visited the affected villages. A decision was taken to inform all the 110 medium- and large-sized chrome tanning units to install their own individual CRPs while the other 110 small units would have to set up a CCRP by March 2000. But this deadline was extended every three months. As far as the CCRP was concerned small tanners were requested to contribute to a feasibility study that would be carried out by the CLRI. However, they did not do so and the study was ultimately fully funded by the CPCB.

(4) Eco Friends called for a boycott of the UP assembly elections in 2002. Although the call was later withdrawn, it did its damage. The local politicians who had been neutral to begin with now became antagonistic to the NGO in particular and the cause in general. There were also signs of disunity among the villagers (divisions based on political affiliations) and the movement lost momentum.

(5) Eco Friends commissioned tests to check the quality of water in shallow tube-wells, canal water and sludge with the help of the Facility for Ecological and Analytical Testing (FEAT) Laboratory, IIT Kanpur and the Industrial Toxicology Research Centre (ITRC), Lucknow. The test results

sent shock waves through the government (CPCB, CLRI)<sup>3</sup> and international agencies like UNIDO and others like the NHRC.<sup>4</sup> National and international media also highlighted the issue. Eco Friends then organised public hearings in the affected areas and there was a discernible change in the attitude of the government officials who attended these meetings and listened to the woes of the people.

(6) In response to a letter written to G Thyagarajan, chairman, Supreme Court Monitoring Committee (SCMC) on hazardous waste and a writ petition filed with SCMC by Eco Friends, the SCMC member Claude Alvares paid a preliminary one-day visit to Kanpur on September 18, 2005. He was accompanied by the officials of UP PCB, KNN, Jal Sansthan and UPJN (See the visit report of SCMC in <http://www.ecofriends.org/reports/057SCMC3.htm>).

### Different Stakes, Different Views

The villagers of Jajmau want that the earlier arrangement of supplying treated sewage mixed with Ganga water be restored and that the dumping of UASB plant sludge near their village be halted forthwith; they want safe drinking water and demand that the KNN not badger them with legal notices for not paying the irrigation cess.<sup>5</sup>

The villagers are concerned that they should not be made scapegoats for the failure of GAP.<sup>6</sup> They have already endured hardships and continue to suffer on account of various health problems, decreasing crop productivity and a decline in dairying activity. They hope that studies will be undertaken to examine the long-term effects of the polluted water on their land

and health. They have done whatever they can to highlight their plight and now await action to relieve them of their problems.

The LI argue that they have contributed (17.5 per cent of the total cost) to the setting up of the CETP. They believe that the wastewater is useful for irrigation. They have been flaunting the results of a test conducted at their behest that shows no traces of harmful chemicals in the effluents.<sup>7</sup> The LIs also maintain that since they have all set up CRPs in their premises they are not to blame for the presence of chromium or any other metal in the wastewater. They claim that they contribute handsomely to exports and earn valuable foreign exchange for the country apart from providing employment to a large number of people. They believe that the authorities are shifting the blame on them when the fact is that the GAP has failed. They also accuse the monitoring agencies (and local NGOs) of targeting them because they belong to the minority community.<sup>8</sup>

The UPJN takes care of most of the GAP assets and says that it is constrained by many factors including finances. The agency contends that it does not have the means to replace rusting machinery and passes the buck to the UPPCB, which, it says, does not act against tanneries; the administration fails to collect the O&M dues. Moreover, the machinery is not designed to treat the kind of effluent that is released.

The KNN and the UPPCB on the other hand, hold the UPJN responsible for poor maintenance of CETP, and the Pollution Control Board has, in fact, issued a notice to UPJN in this regard. The UPPCB is the agency that monitors and enforces rules, but it is considered one of the most corrupt institutions in the state. But under pressure it has come up with a list of erring industries that have been closed down. The regional officer of the PCB has recently opined that tannery waste should be segregated from sewage and that a mixture of the two ought not to be used as irrigation water.

The KNN being an elected body, could play a crucial role in resolving the conflict. But its role is restricted because of limitations in the 73rd and 74th Amendment and unwillingness of politicians and bureaucrats to devolve powers.

### Passing the Buck

The flower cultivation, the main economic activity in Jajmau, has almost stopped. Agricultural productivity has declined drastically. Land and groundwater

have been poisoned and, if measures are not taken urgently, the damage could be permanent. The impact on the health of the people living in these villages has been considerable: skin lesions, stomach-related diseases and unnatural abortions, both in human beings and livestock, are reportedly common. Aquatic ecology in the Ganga has also been adversely affected because of the high levels of biological oxygen demand (BOD) and chemical oxygen demand (COD). People who live in and around the Jajmau industrial belt are reported to be subject to air pollution as a result of chemical fumes and the stench of the dead carcasses and glue factories. However, till now the impact on ecology and society has not been scientifically studied, so it is difficult to quantify the damage done.

The problem is that while multiple agencies are involved in the whole affair, there is no single department to coordinate or give decisive direction to the attempts to alleviate pollution. The situation calls for accountability and a clearcut division of responsibilities as well as a coordinating body with corresponding powers.

It seems that the government made a mistake in accepting responsibility for cleaning up the mess created by the tanneries. Rather, the onus for doing that should have been on the polluting industries – collectively or individually. This can be done even now; government agencies could provide necessary technical inputs and monitor the activity. The leather industry should be encouraged to form a cooperative to effectively undertake the task of cleaning up the mess. A similar experiment is being tried out in Unnao (right across the Ganga) where a group of LIs have set up a CETP, which is run by an independent body.<sup>9</sup>

However, until a solution is found, the villagers should be provided with an alternative source of safe irrigation water. They should also be given technical and financial assistance to reclaim their lands and get rid of the poison that has entered the food chain. A scientific study needs to be conducted to reveal the long-term medical effects of the exposure to poisonous water.

The GAP was implemented with financial and technical support from the government of Netherlands. But there does not seem to be any arrangement to make the assets and agencies created under the programme financially self-sufficient.

Also, the government has not been allocating enough funds to meet the O&M costs. This is an effort to which the industries and general public also should be made to contribute.

Agencies like the CLRI and politicians who are trusted by the leather industries should intervene to resolve this conflict. The communal colour sought to be given to the conflict<sup>10</sup> presents a false picture and should be discouraged. ■■■

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### Notes

- 1 Although this area falls under the Kanpur municipal limits, infrastructure facilities like roads, electricity and piped water supply had been absent till now.
- 2 <http://members.tripod.com/sankatmochan/index.htm>
- 3 Both CPCB and CLRI promised action; CPCB carried out its own test results and recommended the closure of many non-conforming tanneries and started preparing an inventory of chemicals used by the erring industries.
- 4 National Human Rights Commission (NHRC) lodged cases (Case No 25499/24/2002-2003/OC, 260/24/2003-2004/OC, 15160/24/2003-2004/UC) on the basis of the reports that were sent to them. It asked the central and UP government for an 'Action Taken Report' but it appears that the commission is not taken seriously by government agencies.
- 5 The villagers have stopped payment of the annual irrigation cess since the last four years till safe irrigation water is made available to them. The farmers who have taken land on lease, however, continue to pay the tax.
- 6 Since there are stricter conditions for discharging wastes in to the Ganga and regular monitoring is done by independent agencies, the authorities instead supply the so-called treated waste to the villages.
- 7 These results have since been refuted by many other reports by government agencies and Eco Friends-IIT test results.
- 8 The government made a mistake by agreeing to clean the waste. The error is being repeated in the CCRP case. Tanners now have easy escape route and an excuse to lay the onus on the government for any failure on their part. Leather factories were required to set up PETP and CRP before the commissioning of the CETP in 1994 but it never happened. So the treatment plants never functioned to capacity. Tanners are also required to share the O&M cost of the plants but they did not do this and were never held responsible or indeed even felt responsible for the waste.
- 9 It should be noted here that there are problems with this arrangement too, and the treatment process here too is not foolproof.
- 10 First because of the religious associations of Hindus to the Ganga and second because the leather industry is dominated by the Muslim community.