It was an intellectual treat to attend an ICAN organized meeting on Urban Waste Water Management on 16 March 2013. The first session produced two classic speeches, first by WPCRC vice president and CFWD leader S. A. Naqvi and another by Rahul Bannerji from Indore. It was an opportunity to develop a holistic approach on water related issues.

Naqvi's speech was well supported by Rahul's as if both had agreed in advance to divide the subject matter, one taking a broad sweep and the other providing evidence and playing a complimentary role. While Naqvi examined the waste water issue at a macro level Rahul showed how it can be done at micro level.

Naqvi drew the attention of the audience to our tendency to discuss the water issue only from two points of view: Either we discuss the issue of river pollution or we talk about water distribution. In between the issue of water treatment gets backseat. Focusing on Delhi he pointed out that 40% of the water treatment facility was available in the city but the condition has failed to improve. He said there are four agencies in Delhi including DJB, DDA and MCD treating water but only 5% of it is used for drinking purpose. Against this, Delhi adds 79% of the pollutants in water. So we are in effect recycling pollutants and not treating them.

He blamed centralised planning system for the scandalous fiasco being perpetrated in the name of water treatment. He quoted a statement by the Minister Jairam Ramesh that Rs. 39, 000 crores have gone down the drain during the last decade without achieving any results.

Saying that the water treatment issue was more important than any other issue he lamented that the governments were not interested in educating people about the need and we, on our part. Think that it was the government's responsibility to treat water. While governments are not willing to involve people, we, on our part, do not think it necessary to participate in the process.

To prove his point against the centralized treatment system Naqvi stressed the importance of returning to the cultural traditions based on peculiarities of respective areas and said land in different areas have different characteristics and those peculiarities can be taken care of under decentralized water treatment system. Explaining, he said the graas grown into the Yamuna bed cannot grow in your house garden because nature has made that arrangement to guard against erosion of soil on the banks of Yamuna but that kind of protection your house garden does not need and the Mother nature knows it.

In the process, we have concretised Delhi roads and side lanes preventing water from entering beneath the first layer of the land. Waste water treatment plans have to take all this into account but by ignoring the holistic approach we in Delhi throw away 60% of drinking-quality water by using it in toilets kitchens and bathrooms. He said it is easier to treat the grey water (water used in kitchen and bathroom), the black water (used in toilets) may have some problems and also face cultural revulsion. This grey water can be treated in a single house and in a single area and re-used. The technology too is not a big problem in this case.

Answering a question he disagreed with not only the policies of the government vis-a-vis the waste water treatment but even with the way the technology is being used. He said the centralized waste water treatment policy is wrong since it takes Delhi as a whole and again, the technology is frequently changed which results in the colossal loss of resources. He said there is an undue stress on rainwater harvesting, which is also necessary but rainwater canbe stored only during monsoons. The real question is, how we are reducing the day-to-day use of fresh water by

Naqvi said like everyone in a family people too have a role in water treatment. It is not a job to be left to the government and the profit seeking private company and people through RWAs have to be involved and it is necessary to propagate the concept of People-People Partnership. Government's role, however, cannot be ignored because it is the government who should be responsible for framing laws such as making it mandatory in the new constructions to have waste water treatment facilities installed.

## Rahul Bannerji

Rahul Bannerji, an IlTian, from Indore fully endorsed the views expressed by S. A. Naqvi. Rahul has practically worked on what Naqvi said. In a sense, while Naqvi was dealing with the waste water management issue at macro level, Rahul dealt it at micro level. He has installed a self-made waste water treatment plant at home at the cost of Rs.30 per square feet. He is recycling the water used in kitchen, bathroom and toilet. He has got a hand pump installed at his house and takes out 40 buckets of water everyday for use. With this his dependence on municipal water is at zero level. Moreover, by using the same water for gardening he has covered his house with creeper (*bell* in Hindi) which has a cooling effect. He does not have to use fans even when the temperature is 45 degree. Let alone Acs or coolers. His expenses on electricity consumption is around 100 unit per month.

Rahul said even in Delhi an individual flat owner can get this waste water plant installed for one-time expenditure of Rs. 24,000 to 25,000. He said the problem than would remain about the disposal of Black water (coming out of toilet). At this stage a member of audience interjected to say that even that can be handled in a single dwelling unit.

Rahul insisted that the centralized waste water management system is wasteful because the cost per unit rises exponentially i.e. if the cost of treating 100 units of waste water is Rs. 100 (this is only an example) it would treble if 200 units are cured. Decentralized or individualized waste water treatment system is cost-effective and does not require sophisticated technology. He, however, there are no takers. People visit his house to see how it works and are amazed to see the benefits but are reluctant to do at their own houses. If people adopt it through sustained campaign there is no water shortage for Indore city and for individual users.

Rahul gave out some important figures: Railways have 1,70,000 toilets wasting an enormous amount of water which needed to be recycled then and there. About Indore he said, out of 391mld water supply for the city 340mld is brought from Narmada. Consequently the cost of water is Rs.18/KL. Percapita supply is 171/KL but 51 % of the population is served by tankers and only 46% geet piped water. Since there is no metering, each household pays Rs. 225 per month as water tax. The recovery, however, is only 45%. Out of the total supply 90% is used for non-drinking purposes which means the almost the entire bulk brought at such a high cost needs to be treated after the use again costin an enormous fund. In asurvey in Indore it was fond that 43% of the people ar BPL and spend 7% of their monthly incomes only on water. With rising costs their burden is bound to grow. By providing centralize waste water treatment system, the authorities in fact burden these groups and subsidizing high end rich users.

He suggested that let the rich fend for themselves which they, in any cas, can afford but propagate decentralized waste water management which will reduce the burden of gigh water consumption demand and help the poor. He said it was necessary to spread the concept of 'water sensitive urban design' wherein the urban planning would begin with waste water management facility which will ultimately reduce the stress on city's demands and the life of you water source.

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