

Punjab: Sindh valley civilization again ready to die

By Umendra Dutt

About two years ago my friend the famous singer Rabbi Shergill in one of his Punjabi article says "There is no doubt that it was just because of a major environmental change that the great civilization of Indusvalley had completely vanished. The same reasons, in the same form are today existed before us. The only difference between the both situations is this that in those times it was a natural disaster but this time it is of man made". Rabbi equated present situation of Punjab with Sindh valley which destroyed because of water scarcity.

Rabbi concluded his article by saying 'Sindh ghaatti aj fir maran nu tyaar hai' which means Sindh valley is again prepared to die . "Will this really happen?" I asked my co-passengers." Of course, it is a fading ecosystem, a dying civilization; a whole community was put on slow death" affirmed Dr Amar Singh Azad, my senior colleague in Kheti Virasat Mission. "It is crime against humanity and nature by our own governments that too on the name of development" I supported him by adding these words. We all are upset and full of anger after visiting villages near Dhakansu drain and Ghaghar River in Patiala and Sangrur districts.

This was our third visit to any river or drain area to educate ourselves on environmental toxicity and its multiple impacts. For me its second river I have tried to followed after Jayanti in Ropar district, where I did a padyatra about eight years back. I found several similarities between disappearance of Jayanti and Ghaghar. Both rivers have lost their "relevance", when its people forgot what they stood for. Over the years, the river eco-system at both places has been ravaged and ruined by the developmental activities carried out in the name of modern thinking.

Let me share some more about our recent yatra which if simply transcribed was a field visit to learn of multiple crises of water, environmental toxicity, condition of agriculture, biodiversity, health crisis on vast spectrum and socio- economic stress around the Ghaghar River. In all what we say can be described as an ecological disaster.

Villages Up for Sale

The vision and riverscape is extremely frightening. In recent times, there has been much more talk about severe health and water tragedy going on in few districts of Malwa region. But we all need to stand corrected. The deadly devastation has spread to all of Punjab now. Even as this is happening, some of our well-wishers continue to ask us – "Why are you activists are creating much scare". Let me respond in the words of Dr. Azad – "Yes we want to create a scare, because it is real and because situation far more destructive then our government can think of."

To say the least, it is a question of life and death in Punjab; and it is becoming evident that Punjab is a dying civilization. Several people may find this offending, ugly and uncalled for. But the indications we are getting from across the Punjab are writing death sentence for Whole River and related ecosystem in this part of country and particularly for this brave community.

The very fact that villages up for sale symbolises of the deep distress and devastation spread across in Punjab. Let me illustrate with a real example. It was March 2002, and it was first of its kind of protest in India, around that time in Harkishanpura of Bathinda district. This was followed by Malsingh Wala in Mansa district in 2005. Both of these villages are situated in cotton belt of Malwa and have one thing in common:

their acute water crisis. It is this situation that forced both villages to put their land on sale. It was a desperate step. But now such water-distress has engulfed the villages of ecologically more prosperous area of Puadh. A village in Patiala district near Chandigarh - Mirzapur Sandharsi is willing to put itself on sale too.

After reading about this in media reports when we visited this village we found that what was bluntly visible was that Punjab is fast turning into a waterless region. It can be Harkishanpura, Mandi Khurd or MalSingh Wala or Teja Rohella, Dona Nanka near Fazilka or Mirzapur Sandharsi - villages after villages are captured by severe water crisis.

There are several indicators to reaffirm of why Dr. Amar Singh Azad said that Punjab is a dying civilization. The symptoms of this slow death is common in the life situations that one can find in our journey from Mirzapur Sandharsi , Harpalpur to Shahpur Theri and Makrodr Sahib in Sangrur. We can classify these symptoms as: severe multiple environmental toxicity. After confirmation of presence of uranium traces in hair samples of children from Baba Farid Centre for Special Children and water and soil samples it is certain that Punjab is in midst of multiple environmental toxicity. This is an indicator that it is situation of extreme emergency in Punjab.

There is drinking water crisis due to drying-up of upper aquifers, water quality going drastically going down; destruction of river eco-system and vanishing aquatic life; and loss of biodiversity and crop diversity. This is along with increasing health problems particularly those related to reproductive health, falling immune capacity, early ageing and cancers. The same pattern is found in domestic animals their reproductive system which is also under serious threat. Falling agriculture productivity, increase in external inputs and rising debts, growing disconnects between farmer and his land are realities that run along. As a result farmers selling their farms and it have led to the emergence of loss of self confidence among affected people to tackle this formidable challenge and restore ecological health of their homes.

Acute Water Stress and its Impacts

I often say in Punjabi that Punj"aab" is fast turning into Be-aab and Punjabis of Be-aab Punjabare bound to become Be-abaad (displaced). The Mirzapur Sandharsi and near by villages are setting the fittest example for this idiom. Surinder Singh, Sarpanch of Mirzapur Sandharsi told us "There is no proper water and such water stress has forced us to sell our land. We are all ready to even sell our entire village." As there is no water left in two upper aquifers – at 70 feet and 150 feet respectively, villagers are facing unprecedented hardship to meet basic needs.

Infect the aquifer at 70 feet had gone dry about 10years back and about five years back the second aquifer which was at 150 too went gone dry. "We are forced to dig 12 to 20 feet every year"; told Harbans Singh, Chairman of village cooperative society.

When the Ghaghar River was "alive" about 15 year back and its people full of zest, they never anticipated they would face with such acute depletion of water. Bu, as Ghaghar died slowly, the villagers were forced to draw water from third aquifer to be found at the depth of 400 to 450 feet. But unfortunately, this water unfit to even irrigate their farms, leave alone drinking purposes. So its discovery is of no use.

A question you may ask at this stage, is who is ready to buy these villages and agricultural land. The farmers of Mirzapur Sandharsi sold their land to establish a distillery company, which is set to draw water from 1200 feet deep aquifers. Villagers are hopeful that company will change their lives after getting water from 1200 feet

deep bore-wells. What is ironic is that after exhausting all upper aquifers, the villagers are finding solution in a factory producing alcohol, as if they are the harbingers of hope. What they perhaps choose not to see is that it is a distillery which has primarily caused destruction of all water sources and contaminated Ghaghar River and its banks.

From the agriculture point of view, the water that a distillery will access is not the same as the upper aquifers. Although, farmers are able to cultivate wheat and paddy, there is no scope for vegetables as the water is extremely hard. It is no surprise then that no farmer is growing vegetables for the last ten years in Mirzapur Sandharsi village. As one farmer remarked, "We have forgotten the taste of our own grown vegetables"

In fact this is a common trend in all villages of this area who are not purchasing vegetables from as far as Ambala. Not too far back this area produced several kinds of vegetables for market as well for self consumption such realities are common even in several villages of Ghannour area of Patiala district. Farmers from Harpalpur situated in that area, says it all "Earlier we use to sell our vegetables in Rajpura and Chandigarh market, but now we are not able to cultivate vegetables anymore. As the water quality deteriorated significantly, it is just not possible." Farmers of Shahpur Theri, Mandavi, Chandu, Makrodr Sahib and Fould will all tell the same story. From growers of food, they are now consumers. The impacts are not just on land quality, family income and self confidence; such a situation has deeply affected household food and nutritional security. Farmers have lost their self reliance, and at the same time there is an additional economic burden to buy food from the market.

On an average wheat yield dropped drastically in last few years in almost all villages we visited. Few farmers are getting as low as 5 quintal per acre wheat. We were told by number of farmers that as ground water going deeper and deeper it is also losing its quality. It often spoils the crop." This is yet again a common perception amongst farmers from different villages. Such a situation has another significant and related impact which is a massive increase in the usage of Chemical fertilizer; which in turn works up the costs of agriculture inputs even more. Farming then becomes an even more costly affair. Now, this results in the economics of agriculture takes a serious beating leading farmers further into debt. Almost the entire agriculture land is being mortgaged. "We were happy and prosperous those days. Using Ghaghar water and getting higher yields in comparison of today. We use to grow Basmati about 15- 20 years back with very less water from Ghaghar getting 16 to 20 quintal per acre yield, 14 to 16 quintals of wheat and even 10 to 12 quintals of Grams. And this we are getting without using a drop of urea in our fields." said Gyani Subeg Singh, a 70 year old farmer from village Shahpur Theri .

When it comes to the unstated related impacts, the loss of agro-biodiversity is another huge issue of concern. We have ascertained found that in last 20 years there is a drastic loss in diversity of species of both crops and livestock. About 25-30 years back, most of farmers used to grow a variety of grams in their fields. Slowly they found grams losing yield, as other crops were becoming dominant. So the farmers discontinued gram cultivation. What is ironic is that in the monoculture landscape of Punjab, not too far, biodiverse farming was a norm. Farmers were growing through combination inter-cropping of single crops like corn, Basmati rice, Cotton, Sugarcane, Wheat, Mustard; millets such as Pearl Millet, Barley and pulses such as Toria , Moong, Masar, Moth, Alsi, Til, Tara-Mira, Gwara, Arhar as well as Chillies.

Biodiversity and Riverscape Lost

Farmers and people living in those times will vouch for the fact that all these crops were grown without any chemical inputs simply by irrigating their farms with Ghaghar water. But as Ghaghar gone dry the biodiverse farming system which flourished here for hundred of years also shriveled -up. The real and life sustaining wealth of the farmers – water, earth and diversity stand plundered.

This has also eroded traditional knowledge system of farming and farming techniques which relied on low or no cost utilisation of natural materials around a household or fields. Now farmers are entirely dependent on externally purchased seeds, chemical fertilizers, pesticides and weedicides. They are now so captured with the idea of chemical farming that they have lost the confidence of thinking out of that box “We cannot grow any thing without chemicals. We know it is poison – but we have no other alternative” said Jaswant Singh of Shahpur Theri, while doing preparation to apply chemical fertilizers in this farm.

When we probed further the realities of farm related debt, Harvinder Singh, Youth Club President of Shahpur Theri spoke with grief “Death of Ghaghar has destroyed both our wealth and health. Now entire village is under debt. Not a single acre of land is free from loan. Several farmers forced to sell their farm land. About 35 to 40 people sold their village entire property and shifted out of village. That’s for those who have land, but there are many others who are just landless farm laborer.

This situation is very much similar to my earlier experience in Mirzapur Sandharsi and Harpalpur. In these villages quite large number of farmers had already sold their land. When I asked farmers at Harpalpur in Patiala on what their opinion is about the offer of Mirzapur Sandharsi villagers to put their village on sale; more then three farmers replied at once in a collective voice – “We are also ready to sell our village.” Then one farmer added with utmost anguish “Why are asking about these two villages, the whole belt of around 40 villages is ready for sell out, only we are not declaring it openly. If we got choice we all are ready to quit agriculture and move out of here”. Another farmer one sitting around there supported his views. These farmers are no more feel any attachment to their village. Surprisingly, the connection and affinity with their land no longer exists.

The most painful experience is yet to come. It is witnessing in real time the murder of a river and her bounties. It was such a chilling truth that made me more worrisome that how an entire society, otherwise known to have evolved around the hydrology of the area has been broken from its water heritage. Everyone whom we met during our visit told us “When Ghaghar River was full of life 15 years back, we use to drink the water directly. It was clear, sweet and tasty.” Vaid Piyara Singh, 55 years of Makrodr Sahib said with glitter in his eyes “Ghaghar was clean and whole village is use to drink Ghaghar water, I used to drink Ghaghar water almost daily while returning from fields – I never felt any problem, but that was about 20 years back.” In village Phoolad which is just 300 meters from Ghaghar we were surprised to see that except two young men all persons sitting in front of us had even consumed Ghaghar water. They told us that ‘Entire population of above 30 has tasted Ghaghar water at some time of their life. It was very tasty.’

More losses, I share with you. At one time the fish from Ghaghar River was very famous. People traveled from near and far to purchase it. Infact, several farmers told us that they had seen fish of 25 to 30 kg. Thousands of fish of different species, tortoise small and bigger were once in large numbers in Ghaghar. Apart from this several wild and domesticated animals freely roamed around the are just twenty years back. Said Kulwant Singh of, 52 years from Makrod Sahib village grief-stricken, “We have let Ghaghar is died in front of our eyes”.

Once Albert Einstein has said “If the bee disappears from the surface of the earth,

man would have no more than four years to live." We really feels this happening right here. In every village we visited, we asked about honeybees and earthworms and sadly we got the negative answer every where 'Now honeybees and earthworms are almost gone, hives are almost disappeared.' indicating more vast destruction of life. Every time when we got depressing answer about presence of honeybees, Dr Azad reminds me of Albert Einstein's prediction. Like earthworms and honeybees several other insects were thrown out of web of life. And the younger generation of farmers even does not know the names of several friendly-insects

In adjoining Chandu village, all the households used to irrigate their farms from Ghaghar water, but now they are forced to scout for other options. "Earlier our animals went there for grazing, bathing and drink Ghaghar water, but now we cannot even think of it. There is only acid there." Said Vaid Subhash, 37 years.

It is not an exaggeration to state that the entire belt of villages on the bank of Ghaghar in Sangrur district was using Ghaghar water not only for irrigation; but also for other domestic usages. Some people also pointed out that River bed has several perennial springs like Nadiya Taal from where they used to get water for the entire year. There were large numbers of Dhaak and Dhaki trees, Jand, Kiker, and bushes of Duaansa in local language. Their loss only indicates that along with destruction of Ghaghar, the existence native plants and trees has also been ruined.

"In those days several species of birds were found around our villages, but now we hardly see even the most common ones like the crow or sparrow. All are gone." are synonymous observations almost everywhere we traveled. Hearing this familiar expression, Dr Azad murmured – "It is our Silent Spring happening in Punjab." I stood speechless and thought to myself whether we are heading towards doom or are in it already. What has happened and continues unabated is an extreme form of violence against the nature, and perhaps in time nature will avenge itself.

There was a time when despite of floods every year, Ghaghar was generous enough with life and prosperity. But now it is, to say the least hell, which we are all forced to live with. Perhaps it is only reflective of the hell that have nurtured within us. . Ghaghar's pollution began 15 to 20 back with toxic effluent from a wine factory at Main, near Patiala and Chambowali drain which joins Ghaghar at Chandu village. It is black, with bad smell. There is no life at all in water. Touching leads to irritation, itching, skin rashes. It is nothing more than acid flowing in a drain,

"Punjab is going to be a state of sick people highly dependent on medicines", these were the words of Dr Amar Singh Azad. He has been repeating this untirelessly for last few years. His words were reinforced during this tour as we witnessed the ongoing massacre of health. What we have seen during this study visit has reaffirmed our earlier hypothesis: Punjab is passing through multiple levels of environmental toxicity. Every village we had visited speaks about the same tragedy. As Dr Azad often says that "The whole ecosystem of the earth is interwoven in a web of highly sensitive interdependence, any toxin in the environment –air, water and soil affects all the forms of life right from microbes to human beings. Almost all the observations conclude that wherever the toxicity is high; humans, cattle, wild animals, other animals including microbes and plants are gravely affected. The whole spectrum of ill effects on human health which various studies have shown is visible in Punjab. The Immunity of the Punjabis is being ruthlessly damaged."

Disease on the Rise for Humans and Animals alike

In each village we got high number of cancer deaths, with every village having a

number of cancer patients under medication. What we get from villagers is stunning statistics on instances of cancers, rising infertility and other reproductive health disorders. This is along with increasing number of neurological disorders, allergies and a severely injured immunity. The farmers gave this information of their memory during our face to face interactions, so possibly there might be some numerical errors. But the spread and widespread occurrence is an indicator that not only cancer, but reproductive health problems are also on the rise at an alarming pace and too in all parts of Punjab. We found quite large number of childless couples, cases of miscarriages, spontaneous abortions and premature deliveries. In each village we also found cases of neurological disorders, children with mental retardation and congenital abnormalities, cerebalpalsy, autism, learning and behavioral disabilities. It is hard to believe that the list of illness is much longer than we thought.

Skin diseases are very common in all villages; to which Dr Azad reacts by saying that this is first signal of diminishing immune system in people of Punjab. Then we also found large number of patients with kidney problems, stones in kidney and gall bladder. Digestive system disorders are another common ailment we came across in our tour. This is tremendously visible disease pattern that can be correlated with body toxicity load caused by environmental toxicity and prevalence of toxins in our ecosystem and food chain. During group discussion it was also noticed that number of young deaths in last ten years is also on rise.

Poisoning of ecology has deep impact on animal health as well; This is more severe and destructive. It is not rhetoric that what we have given to nature, is bound to come back to us with more velocity. When we poisoned Ghaghar with toxics, it returns to us in the form of both human and animal health being marred. The status of animal health indicates that toxicity has reached its threshold level. We are fast moving towards total collapse of reproductive system. Apart from human beings, cows and buffalos are also losing their reproductive capacity. Now they have a lesser lactation period, lesser reproduction cycles. From 15, it has now come down to 5 reproduction cycles. More and more cow and buffalos are becoming sterile. With, toxicity on all time high as these animals are also facing extreme miscarriages and abortions. At least 70% animals are become unproductive and sterile. Their milk productivity is also going down. Moreover even Mare – female horses are becoming sterile. Indigenous hens are also not producing eggs as they used to. When pasturelands in and around villages thrived, so did the cattle there. The loss of Ghaghar has also added to the financial burden of water. Said one farmer, “earlier our animal use to go Ghaghar, now we have to run a pump to fetch water. Water from 150 feet is contaminated, its taste is not appropriate. We are ruined due to poisonous water was allowed to flow in Ghaghar”.

Question of Accountability

But question is - who is responsible for this ecological destruction. How we are going to give justice to river Ghaghar, her inhabitants and the nature. Who has to blame for putting this whole area into severe environmental health crisis? What has made river Ghaghar dead and vanished life of thousands of animals, fishes, tortoise, birds and other creatures, It has very simple answer - The Development with the focus on increasing GDP .

The factories of liquor and wine at Banaur, Patiala, Patran had caused death of Ghaghar. The owners of these factories , there management , the departments which gave No objection certificates (NOCs) to establish and run these factories , the officers with whose signatures these factories came into existence, the Punjab

Pollution Control Board which is primarily responsible for monitoring pollution and effluent, the Revenue department and Directorate of excise and taxation, the finance ministry of Punjab which is filling its pockets from taxes on these factories thus giving them legal status and lastly the people who purchase and drink wine made at these factories are all responsible. They have all contributed to the death of a river and her ecosystem, all the impacts of health, water toxicity and displacement of farmers. These are environmental criminals who need to be punished. Today, Punjab needs a true and honest people's movement to take up the issue of environmental toxicity, high use of pesticides, life of water resources - rivers and life of Punjabi civilization. By giving a strong call to the public Sant Balbir Singh Seenchewal has already taken initiative in this direction. The situation demands that we have to go much further. We need to start talking the political ecology and political economy of decision making. People have to start thinking politically to punish the environmental culprits of Punjab. We have to evolve newer ways to punish those who are responsible for this devastation. I include myself in the list as one who had also in my earlier days contributed to irresponsible acts, and sometimes even now too. But all guilty, must be punished

The killers are of the same genre as those who drew to death Kali Bein, East Bein, Budha driya, Satluj and other rivulets of Punjab. One can find almost similar water crisis in districts of Faridkot, Muktsar, Bathinda and Mansa. I recall my visit to Burj Bhalaike, Nandgarh and Malsingh Wala villages of Mansa where water crisis is ruining the villages and I found same was the situation at over dozens of villages adjoining the world famous Ramsan Site, the Harike Wetland.

My friend in understanding and thought understands the connection with ecological issues. Prof Shubh Prem Brar from Bathinda has rightly said "The Southern Punjab is surrounded by toxic water ways; It is like garland of poisonous water encircling the large area of Punjab." If you see the map of Punjab you see poisonous water is encircling entire south, south-eastern and south-western region of Punjab. It is absolutely terrifying. My heaven Punjab is on slow death."

So, I ask one and all, is it possible to bring back the land and river scapes of Punjab from the clutches of death. Is there any life saving philosophies and techniques? Is it possible for a drawing Punjab to seek help through a life jacket? , Even as I wait for the answer, 63 year young revolutionary Dr Amar Singh Azad is more eager to step on a strategy in real time. He always says "Punjab is dying civilization and time is running out hands." None of us want Punjab to die, do we?

(Author is Executive Director of Kheti Virasat Mission; a Jaitu based a civil society ecological action group working on natural farming and environmental health. Contacts: umendradutt@gmail.com ; Phones: 09872682161)

Umendra Dutt
Executive Director
KHETI VIRASAT MISSION
141 , Street 3, RV Shanti Nagar,
Baja Khana Road
JAITU-151202
District-Faridkot,Punjab
Phones:Resi - 01635-503414
Office - 01635- 503415
Mobile - 09872682161
umendradutt.blogspot.com

<http://www.khetivirasatmission.org/>