## Punjab: Turning into Land of Dark Zones - Need of People's Movement for Water Conservation

Surinder Singh KHETI VIRASAT

## INTRODUCTION

Punjab- the name itself is explanatory and stands for abundance of water. It is the land of water heritage of Guru Nanak Dev and Bhai Kanhiya. The people of Punjab are ardent follower of great piau tradition of "Bhai Kanhiya" i.e. Serving water to humanity without any discrimination of caste, creed, religion, & sect. It has the glorious tradition of preserving water rights form the era of Shri Guru Nanak Dev Ji. The incidence of Panja Sahib is a witness to it. The Panja Sahib symbolise that, the water is for all and the water is fundamental, natural and basic right of every living creature on the Earth. But, it is really ironic that the land, which is named after the five rivers "Punjab", is endangered to become the land without water that is-"Be-Aab".

Moreover the present situation of water resources in Punjab is highly critical. Already by losing her three rivers due to partition of India; the present Punjab is now the land of mainly two rivers only i.e. Satluj and Beas. As some reports indicate that water flow is alarmingly going down in both of these rivers is also an issue of great worry. The Himalayan glaciers are melting down; the overall water flow is decreasing causing great ecological-imbalance in the region. Due to loss of massive forest cover in Shivaliks resulting in drying up of several sub-rivers, natural streams and revaluates making the foothills of Punjab a water scarce area. As a result the ground water availability in Punjab is drastically hampered. At present Jayanti, Budki, Siswan the three major tributaries of river Satluj flowing through the District Ropar have been vanished. They are no more rivulets now. It is fate of 'Patiala ki Roh'

and several other streams originating from Shivaliks. Where as famous 'Kali Bein River' has lost her character as a river. The "Kali Bein" originates from two Bawries adjoining "Tarkiana-Naryanpur" wetlands, and has religious, spiritual and social significance for the people of Punjab, as Guru Nanak Dev took a holy dip in the river "Kali Bein" at Sultanpur Lodhi. But we turned it into an open sewerage only. Thanks to Sant Balbir Singh of Sinchewal who took a Kar-sewa to revive this holy river. But several other rivers- rivulets are not so lucky as they are bound to remain dirty .The Buddha Nallah another major tributary of river Sutluj is most contaminated stream at Ludhiana, containing heavy amount of deadly pollutants. We can count several streams in this class namely - Chitti Bein, Charan Ganga and others. The rivers -Tangri and Ghaghar which were once caters the entire area through out the year now can be seen as dead rivers full with heaps of sand in seasons other than monsoon, when it play havoc in the area creating floods and devastation.

Another alarming situation one can easily observe in Punjab, is destruction of wetlands, natural reservoirs and ponds. Wetlands plays major role in recharging ground water and sustaining required moisture in soil and surface. But Punjab is about to lose her wetlands not only due to wrong planning but also due to criminal negligence and greedy deeds of mankind. Punjab had already lost its several wetlands. The great Bhupindra Sagar Lake in Sangrur district, which was once known as favorite hunting spot of Maharaja Bhupindra Singh of Patiala, is no more now. The mighty Bhupindra Sagar was once spread over the area of 1280 Hectares. The list of disappeared wetlands is an indication of devastation, which is knocking

the door of Punjab. Few of districted wetlands are Chhangli Chhamb – 1000 Ha, Chhangli Tabo-140 Ha, Chhamb gurditwala Ferozpur-100 Ha, sangeri Mansa-41 Ha, Sharmkot Gurdaspur-12 Ha, Gaunspur chhamb Hoshiarpur-100 Ha, Jandwal Chhamb Hoshiarpur-100 Ha, Rahon De Chhamb Jallandhar 300 Ha. The one of major wetlands in Punjab "Tarkiana" wetland near Dasuha, is no more on ground, remains only on papers. Other wetlands as Jasterwal, Khanuwan, Lobana (near Nabha), Mand Bharthala, Rababsar and Bareta are the worst victims of man-made disaster and ignorance. The Lobana wetland is almost dead though government considers it a wetland on papers; wetland is loosing its area to encroachments. This is the common fate of all natural wetlands of Punjab. But, man-made wetlands are also facing almost similar threats. The wetland eco-system along with river eco-sphere

in Punjab is passing through very critical stage and this entire scenario

Apart from this the several major reservoirs such as Sitasar (Sunam), Ajj Sarovar (Kharar), Mullanpur GaribDass, Gharian, Pandusar (Dasuha), RajeTal, Bopa Rai Kalan, Kahangarh, Chamunda Devi, Thand Kasel, Attariwala, Batala, Gurdaspur, Bhagna, Fethgarh Churrien, Chmiari, Preet Nagar, Ramsar, Lakshmansar (Amritsar) are in condition of distress. Several among these has marvellous architectural design with splendour beauty, but now only ruins remains. Most of these ponds are situated in Amritsar district. One can see the tradition of constructing ponds in Punjab through the windows of Ghats of these majestic monuments. The former princely city of Sangrur once had four major reservoirs on all four corners of town, but the man made foolish decisions killed



Picture1: Village: Giana: Bathinda

all four tanks, and this is too declared as the so called modern development. The princely town of Nabha has also lost its famous HattiKhanna Talab along with several other ponds in town and in adjacent villages. The ruins of traditional ponds system of Punjab can be found in the districts of Amritsar, Gurdaspur, Hoshiarpur and Ropar. The remains of puckka ghats with beautiful construction are the evidence of the rich native tradition of Ponds, their architect and design in Punjab. But this great glory of conserving water is the thing of forgotten past. Today nobody is aware about it and no body wants to care about it. It is sad and unfortunate its own people put this great pond system on death in Punjab.

Only four decades back one easily can find three to five and even more ponds in every village of Punjab. But courtesy to the modernized development the majority of them are died, disappeared, encroached and turned into farms, Government offices, Shopping complexes and Kothis.

The sad story is not at an end here. The remaining village ponds are also dying day by day. The encroachments and dumping of garbage are the major threats to these water bodies. The Man is destroying water- the very base of life and nature. This is a crime and sin against GOD and Mother Nature & also a crime towards their own future generations. The Nature is now giving death-bell to us as more then 80% of Punjab is either turned into Dark Zone or Grey Zone. Turning of Punjab into the land of dark zones is very serious issue. Out of seventeen districts of Punjab the ground water balance in seven districts is in negative. That means these districts are exploiting more water then annual net recharge, thus causing deficit water budget. The Jalandhar district is one of the worst effected zones in the state. The entire Jalandhar district is under dark zone category its all ten blocks are dark zone. It is the fate of Kapurthala, where all five blocks are dark, and then Moga all four blocks are dark, Sangrur all thirteen are dark zone, Fatehgarh Sahib all five are dark zone. Then Amritsar district, which has sixteen development blocks out which fourteen

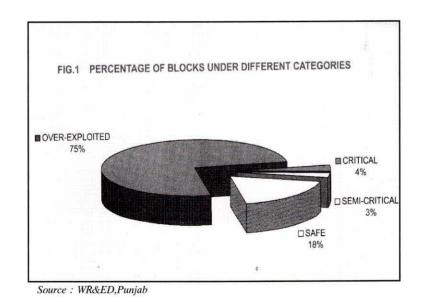
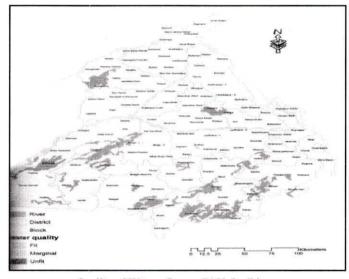


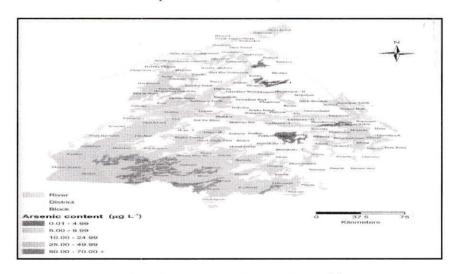
Fig. 1:

are dark zones and other two are gray. The Patiala and Ludhiana districts are also all most dark zones. In Patiala Eight out of nine and in Ludhiana Ten out of eleven blocks are dark zones.

Moreover the ground water table in the past twenty years recorded a dangerous decline from 15-20 feet to 150-200 feet in some parts. The ruthless overexploitation of this precious resource had led us to this situation. Is it the gift of green revolution? In 1967 Punjab had around 55,000 tube wells only where as today this figure crosses ten Lac. This sounds the speed with which we are ruining our indispensable natural resource. The exploitation of ground water has increased by 200 times in last three decades. Where as recharging ratio has been drastically decreased creating an irreversible gap.



Quality of Water: Source PAU, Ludhiana



Arsenic In Ground Water : Source PAU, Ludhiana

Punjab: Turning into Land of Dark zones - Need of People's Movement for Water Conservation - Surinder Singh

This is only half dark side of the fact. The white zone area of Bathinda, Mansa, Mukatsar, Faridkot and some parts of Ferozpur has problem of salinity and Chloride. Where as Nawanshahar and Hoshiarpur districts has problem of selenium contamination. Several other areas are affected with surfacing of Nitrates in ground water. The nickel and chromium is already reported in Ludhiana and Mandi Gobindgarh

Similarly some other studies carried out by Physics and Chemistry Departments of Guru Nanak Dev University and Soils department of Punjab Agriculture University confirmed the presence of heavy radioactive elements increased the gravity of situation.

On the Presence of radioactive elements like Uranium and Radon along with heavy metals like

Arsenic, Mercury, Cadmium, Nickel, Chromium and Selenium and presence of insecticides has increased the gravity of problem of human health risks in punjab

So, Punjab is heading two ways. Either there will be NO WATER or there will be CONTAMINATED and POISONOUS water and both ways lead towards turning Punjab into "Be-Aab or Land Of Dark Zones".

Therefore there is urgent need to build a strong peoples movement for water conservation. It is the day that we should realize the gravity of situation today only, otherwise tomorrow will be too late.

To evolve a sustainable path to bring Punjab out of worst crisis it is facing.

