

Hill Torrent Floods Impacting the Southern Punjab Pakistan

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The floods caused by La Nina (a large low air pressure system) and climate change have resulted in heavy monsoon rains through hill torrents till end August 2022 in southwestern Punjab in south Punjab, Pakistan. Hill torrents from Dera Ghazi Khan (Vehoa, Sanghar, Vidor etc) and Rajanpur (Kaha, Chachar etc) showed highest peak discharge during 2022 monsoon season. In southwestern Punjab majority of the damage has been done by the hill torrents with 14 being main as mentioned below with seven main hill torrents in Dera Ghazi Khan district (Kaura, Vehoa, Sanghar, Suri lund, Vidor, Sakhi Sarwar and Mithawan) and Rajanpur District (Kala bagga khosra, Kaha, Chachar, Pitok, Suri shumali, Zangi and Suri janoobi). These hill torrent floods have badly caused multi-dimensional damages to life of the human beings, animals besides damages to infrastructure inclusive roads, buildings etc. Moreover the damages to houses have badly hit the area making people homeless and compelled the people to live on roads under the sky. Some families waited for the rescue with hill torrent flood water everywhere around them with no way to escape. Some of them stayed on the tree trunks for about 24 hours without meal and other human needs. Both Dera Ghazi Khan and Rajanpur districts have been included in calamity hit districts by the government of Pakistan. More than 0.30 Million people have been affected by the hill torrents flood in southwestern Punjab. Moreover people displaced and living as refugees are also further at risk seeking assistance. More than 60 people have been reported to be killed; even more people have been injured with likely increase in number with more rain prediction in coming days. More than 4000 houses have been destroyed completely or partially (inclusive assets kept inside like dowry of the daughters in particular gold ornaments). Thousands of animals (a main source of livelihoods for families in spate irrigated areas of southwestern Punjab) have died in the floods. About 0.20 Million acres of crops and fruit orchards in Punjab have been affected. Most of which is from Southwestern Punjab hill torrents as the floods from rivers were less intense than floods of 2010. Infrastructure damage to roads and bridges has restricted people migrating to safer areas and aid reaching the needy people. Electricity failure has affected thousands of people due to damage of power lines. Internet issue has been reported too in many of such areas due to heavy floods and rains especially on August 19, 2022 limiting the information about need of the aid. These hill torrent floods ultimately ends up in rivers which are also inundated too much depicting the inability of the existing infrastructure to absorb this huge flood water.

Response to flood disaster with support of governmental, non-governmental organizations, individuals and some welfare organizations was slow initially however increased with more pathways open for movement of the sponsors and relief providers. Flood relief as mentioned above is being provided in the medical camps, animal health care, and provision of healthy clean water, tents for housing, clothing, shoes. Livestock health care camps reflected that animals were affected from diseases like foot and mouth disease, high fever, diarrhea, abdominal worms, stones in throat guts. Vaccinations and free medicines distributions are being made. Human medical camps reported to have more contagious disease, fever, malaria etc. Ration, gas cylinders are also being

distributed among flood affected people. Moreover cash assistance, blankets, mattresses, raincoats are also being provided. The water ponded up will have far reaching negative impacts on life of the humans, livestock, agriculture etc their rehabilitation will be a great challenge in coming months.

Moreover, already scarce trees present in the hill torrent ecologies in southwestern Punjab (in the harsh arid environment) have been uprooted due to torrential rains and floods which will further amalgamate the future outlook of the environment causing more aridity in the spate ecologies of southwestern Punjab having far reaching negative consequences. Landslides in spate irrigated area of southwestern Punjab has blocked the roads hindering the trans-province goods transport of trade items inclusive food, grains, fruits and vegetables etc. It has caused on one side shortage of food and trade items supply in areas of supply chain causing price rise and non-availability of the items and reducing the business and livelihoods chances in populations and areas which are even not directly affected by the hill torrents of southwestern Punjab. On the other side, lack of flow of the trade items results in surplus of the commodities on one side where higher supply and availability results in reduction in price even below the cost of production which affects the farmers and people dealing with relevant business. People living around flooded water have reported casualties resulting from snake bites where treatment is also lacking.

There are some social complaints too. Sexual harassment of affected women (when their husbands or other male family members are out in search of food and water etc) has been reported when they are alone under the open sky, or in tents without any door. In remote areas, there are pregnant women reported who are ill nourished to whom medical facility has never reached. Moreover, few cases of snatching of the flood relief luggage and ration on the highways have also been reported. 250 houses have been reported to be completely disappeared from the earth surface in Adda Afzal Abad near Fazal pur in Rajanpur District. One family from Adda Afzal Abad whose house has been reported to be totally devastated consisted of an old mother and two sons. The more bitter part is that all three of them are blind and waiting for angles to reach to them for food, water and stay etc.

Way forward:

As per Climate watch and the global climate risk index 2021, despite very low carbon footprint Pakistan is among the top 10 countries most affected by the weather extremes. This situation demands international support as well to cope this calamity / human disaster situation in a much better way. Following points should be kept in mind on priority to pro-actively engage and ease the sufferings caused as a result of the floods in hill torrent areas of southwestern Punjab. Food security, livelihoods, livestock support, shelter, health, water, hygiene and other relief items etc are very important aspects in rescue and rehabilitation work. More blankets and tents are needed. Moreover as the winter season is approaching sharp, hence there is dire need for construction of the damaged / devastated homes for protection and stay of the family.

For the last 75 years in Pakistan, hill torrent damages in general have not been given due consideration for sustainable solutions. Particularly in Southwestern Punjab, no serious efforts have been made for sustainable water management and distribution. The volume of water losses and damages it causes is multi-magnitude. If not given due consideration even now, the

humanitarian and ecosystem disturbances and concerns will continue in years to come as well. Let the water flow on its natural ways and provide drainage as well alongwith ensuring the uniform distribution of hill torrent water for improving the agro-forestry and reducing the land degradation losses besides maintaining the ecosystem richness. “River Act” (which state that construction in river catchment would be regularized) was never implemented in such areas. Land use zoning was ignored reflecting governance failure at the cost of human disaster. Highest peak flows in Vehoa, Sanghar, Vidor hill torrents in Dera Ghazi Khan and Kaha, Chachar in Rajanpur district are the evidences amplifying the need of water storage and allowing water flows on natural paths to harness its benefits rather than facing the damages discussed above. Likewise the drain system can be substantially improved in southwestern Punjab. Draining the ponded water from fields is also very important to bring soil in workable condition timely for sowing crops for the coming winter season.

Focus on agro-forestry can bring some improvement in rehabilitation of the ecosystem. More area will be available in next one month for growing crops through use of the residual moisture of the soil. We cannot avoid natural calamities however; we can at least make efforts to reduce such calamities turning into human disasters.

A. Selected Pictorial views from Dera Ghazi Khan hill torrent affected areas
Fatehaani, Near Basti Mamoori vidor hill torrent command area Dera Ghazi Khan







Yousafwala, Vidor hill torrent command area Dera Ghazi Khan









Kumhar wala, vidor hill torrent command area Dera Ghazi Khan where rice crop has been drowned within the water



B. Selected Pictorial views from Rajanpur District

Damage in Jhok Mahar M Pur Dewan Tehsil Jampur hit by Kaha hill torrent



Health camps held at various places in command areas of various hill torrents especially Kaha and Chachar



Cotton crop flooded with kaha hill torrent water at Mouza union council number 2, Muhammad pur dewan



Flood situation near fazal pur rural areas on western side of the Indus highway hit by water from chachar hill torrent. This torrent heavily damaged Fazalpur and vicinity.



Flood relief activities by various welfare organizations in Rajanpur hill torrent affected areas

