

Pakistan Needs Vast Water-Management Plan

by Ramtanu Maitra

Aug. 28 (EIRNS)—The floodwaters that began devastating Pakistan at the end of July are continuing to their destructive course. While the provinces of Khyber-Pakhtunkhwa and Balochistan, situated west of the River Indus, the country's lifeline, are waiting for the floodwaters to recede, the Indus is now devastating the southern province of Sindh on its way to the Arabian Sea. Still ahead, are the heavy monsoon rains that lash the Indian subcontinent throughout most of September. In other words, there is no telling how long this devastation could last, or how much worse things will become.

The true nature of the catastrophe, is probably much harsher than what has come out in the media. But even those reports indicate that this has been the worst flooding that Pakistan ever encountered in its 63 years of existence. It has affected at least 20 million people; made some 6.5 million homeless; and endangered the lives of 3.6 million children. Aerial food drops were not possible in most of the flooded areas, and moving people out of harm's way became a painstaking adventure. People were moved in small numbers by boats, while reports indicate many more millions still need to be evacuated. Food is running short, potable water is non-existent, and all that is left in certain areas are the masses of people trying to get their families to a safe place.

What Pakistan needs to do for its long-term security, is to develop a water-management plan whereby the annual rains can be stored in inter-linked reservoirs, controlled through locks and canals. In addition, the devastation of forests—Pakistan has only 5.2% of its land under forest cover, compared to 25% in 1980—has allowed the water to come downstream too fast. These forests have to be regenerated.

By developing hundreds of reservoirs and small dams to hold water for utilization on the water-short plains, Pakistan's biosphere, over a period of time, can



UN/WFP/Amjad Jamal

Pakistan is experiencing the worst flooding in its 63 years of existence. It has affected at least 20 million people; 6.5 million are homeless; and the lives of 3.6 million children are endangered. Shown: Flood victims of the city of Nowshera wade through the water-filled streets, Aug. 3, 2010.

be transformed. A system also needs to be developed to store water in many medium-size reservoirs in Sindh, by harvesting rainfall and river overflows which occur during the monsoon season.

Meanwhile, Islamabad is appealing to the outside world for money. Not much has come through yet. What the exact requirements are to take care of the immediate necessities is not clear to anyone, but what is clear, is that too little has been done so far. Pakistan is now negotiating with the IMF (International Monetary Fund) for a raincheck on this fiscal year's (July 1, 2010 to June 31, 2011) loan payments. Loan payments to the IMF, other financial institutions, and countries that have loaned funds to Pakistan, so far amount to about \$7.6 billion. Pakistan has as its reserve a paltry \$15 billion, and a huge commitment to the millions of flood victims.

Express News reported on Aug. 27 that the IMF has agreed to issue the next tranche of \$1.2 billion of a standby loan to Pakistan, on the assurance that it will enforce the reformed general sales tax starting Oct. 1; however, the IMF Board has yet to take a final decision. The IMF has agreed to relax some conditions regarding economic targets, including a reduction in the tax collection target during fiscal 2010-11.

It is a disgrace that the world communities remain silent while the IMF, officially an adjunct of the United Nations, but actually run by the world's most powerful financial institutions, is imposing conditionalities at a time when millions of lives are endangered. However, Pakistan's Finance Minister Abdul Hafeez Shaikh, a textile mill and hotel owner, former World Bank country head in Saudi Arabia, and a general partner in the growth capital company New Silk Route Partners, which focuses on private equity opportunities across Asia and the Middle East, has expressed satisfaction with the negotiated outcome.

What Caused the Floods?

There is no question that the floods would not have occurred without heavy rains. However, it is a foregone conclusion that the annual visit of the monsoon, which keeps people of Pakistan and all South Asian countries alive, will bring in heavy rains. Some years the rains are extremely heavy, some years they are not. Some years, some areas get disproportionately heavy monsoon showers, while other areas remain rain-famished. That is a historical fact, and while regional leaders in any of the South Asian countries might feign surprise at the time of crisis, the fact remains that the monsoons come every year.

What occurred to cause the calamity in Pakistan does not happen every year: The jet stream, a massive ring of high-speed winds, moved more quickly than usual over the northwest, causing wet monsoon air to be sucked faster and higher into the atmosphere. The stream, which is normally too high to affect everyday weather, but does influence large-scale weather patterns by shifting the atmosphere around, "supercharged" the monsoon, leading to some of the heaviest rainfall in memory.

Scientists say the hyperactive jet stream also caused deadly landslides in China and the drought in Russia, triggering the current wildfires. The stream had split in two, one section heading north over Russia, and the

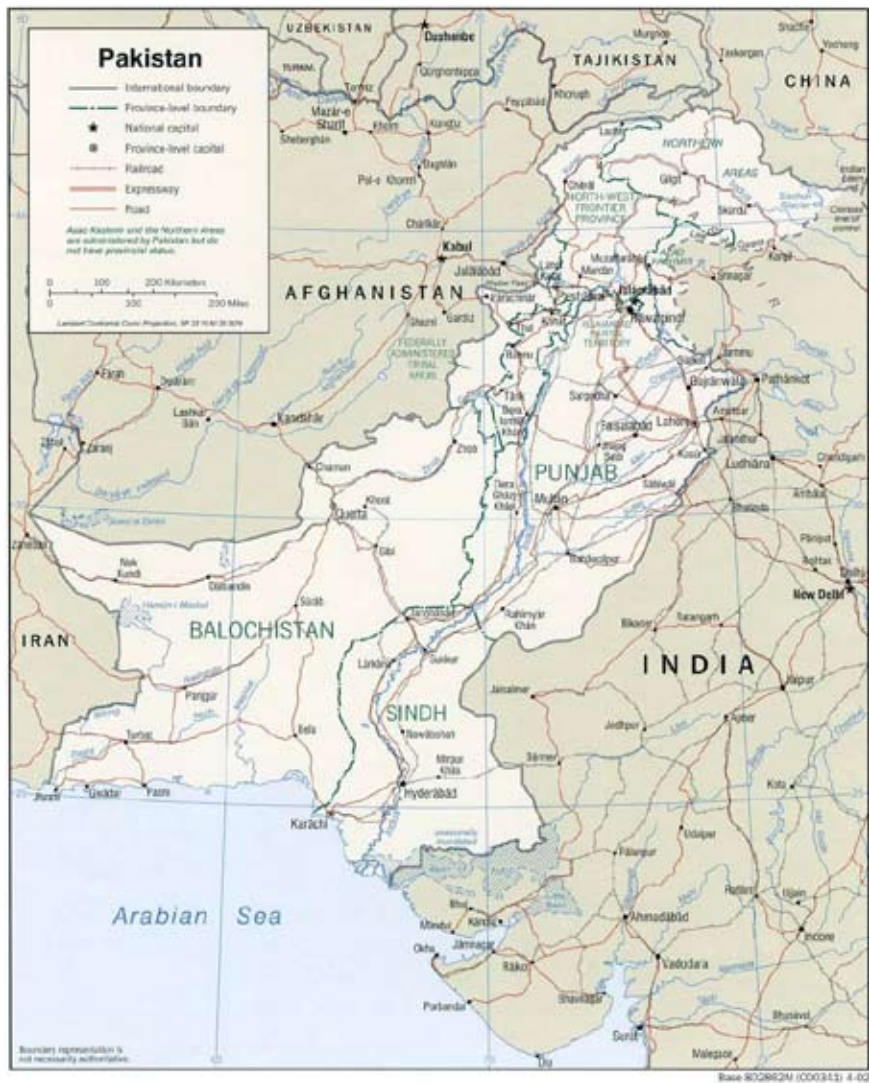
other going south over the Himalayas into Pakistan. Experts say it was very unusual for the stream to head that far south.

As a result of this phenomenon, torrential rains came down on the hills west of Kashmir, flooding the Swat Valley, the first victim in this debacle. The amount of water that came down within a few days would have caused flooding in the Swat Valley, anyway, but what made it into a death trap, was neither the fault of the jet stream nor the monsoon. Instead, one must look to the power of the timber mafia, which has a particularly strong hold on the areas now affected by flooding.

One of the most powerful and ruthless organizations within Pakistan is the timber mafia, which is engaged in illegal logging, estimated to be worth billions of rupees each year. The group's connection to politicians at the local and federal level has been commented on in the media for years. The constant warnings about the timber mafia almost always include mention of the increased susceptibility of de-forested regions to flooding, landslides, and soil erosion. The flooding has been further intensified in areas where the timber mafia has felled trees, and hidden them in ravines prior to smuggling them out of the area. Dislodged by torrents of water, the logged trees, carried down by the mud-heavy, swift-flowing water, have swept away bridges and people and anything else in their path.

Although the 2010 floods are unique in their killing power, this was a disaster waiting to happen. The U.S. Congressional Research Service, in its report "Security and Environment in Pakistan" (Aug. 18, 2010), pointed to a World Bank study which stated that there are over 2,500 glacial lakes in the Himalayan region of Pakistan. Although just a small fraction are considered dangerous, these can cause deaths of thousands within a few hours. A burst can discharge millions of cubic meters of water and debris in a few hours into downstream com-

FIGURE 1



munities. Has Islamabad done anything to protect those impoverished Pakistanis who live in distant parts of the country?

Once the mud-heavy water, now carrying thousands of tons of debris, came hurtling down to meet the River Indus at the junction of Khyber-Pakhtunkhwa province and the Punjab, the floodwaters overfilled the river, which was already running high, flooding the western part of Punjab, inundating the fertile croplands there, and submerging hundreds of villages. Now, the water is flowing southward through the western part of Sindh to fall into the Arabian Sea. However, the river is incapable of carrying the volume of water it is burdened with, and the southwestern Sindh is undergoing large-scale flooding now.



UN/Evan Schneider

While a shift in the jet stream, combined with the annual monsoon rains, and the denuding of forestry by the “timber mafia,” created a perfect storm for the century floods now inundating Pakistan, this was a disaster waiting to happen. Only a top-down water-management plan can prevent another such tragedy. Shown: Flooded areas near the city of Multan, in Punjab province, Aug. 15, 2010.

The Damocles Sword

Unless the world community, with the genuine help of the Pakistani authorities, can come up with short- and medium-term solutions to cope with the aftermath of this unprecedented natural disaster, it is a foregone conclusion that much worse will follow.

To begin with, the hapless people with their families will have to deal with the lack of clean drinking water. All kinds of water-borne diseases, such as cholera, dysentery, encephalitis, hepatitis, among many other lethal diseases caused by parasites and viruses, will kill thousands, picking their victims from the millions already debilitated by the hardships they have undergone due to the floods. Children and the old people will be the primary victims.

In the medium term, Pakistan will have to deal with crop damage caused by the floodwaters. According to the FAO/GIEWS [Food and Agriculture/Global Information and Early Warning System] Watch report, the latest estimates are that at least 3.2 million hectares of standing crops, including rice, maize, cotton, sugarcane, fruit, and vegetables, have been damaged or lost. This represents some 14% of the total cropped area (based on 2008 figures).

Preliminary reports point to substantial losses of cotton and sugarcane that, together with rice, account for a large proportion of the country's export earnings and are important cash crops for farmers. As a result, losses may have a bearing on the country's trade balance, as well as impact household incomes. The country produced 64 million tons of sugarcane (from 1.2 million hectares) and 2.2 million tons of cotton (from 3 million hectares) in 2008.

Pakistan's agricultural sector is a major part of its economy, contributing 20-30% of the country's gross domestic product (GDP), with about 70% of the population dependent on agriculture. Roughly 45% of the

working population is employed in agriculture, forestry, and fishing.

The Congressional Research Service report pointed out that, in the last decades of the 20th Century, Pakistan's agricultural production grew sharply, increasing by an average of 4% per year, in large part due to the use of high-yield crops, increased government prices for crops, and subsidies for irrigation water, fertilizer, and other inputs. In recent years, however, agricultural production has been declining. Among the many reasons cited for this decline are:

- shortage of irrigation water and deterioration in the irrigation network;
- soil degradation from fertilizers and other chemical inputs, and low efficiency from most farm inputs;
- low technology use, and lack of farmer knowledge of technology;
- lack of crop diversification and focus on wheat production, particularly by some donor organizations.

The UN reports that although Pakistan was a net exporter of wheat and other cereal grains in the 1980s and 1990s, it became a large net importer of food products in the new millennium. It is evident that Pakistan will need to import at least 2 million tons of food grains.

Pakistan's Long-Term Needs

Although Pakistan's catastrophic floods have claimed at least 1,600 lives and made millions homeless, the problem is not that it is inundated with water. Pakistan, in reality, is a water-short nation, and its southern and western provinces are especially water-deficient. However, Pakistan gets plenty of rain during the monsoon months, but does next to nothing to store that water and make it available for domestic, agricultural, industrial, and commercial uses.

While the Punjab is well served by three large rivers—the Indus, Jhelum, and Chenub—the entire western part of Pakistan, including Balochistan, depends on snowmelt and rainfall. Sindh gets very little water, since the bulk of the Indus water is used, or evaporated, by the time it arrives in Sindh.

While Pakistan has dozens of projects in the planning stage, very little money has been allocated for water management. Moreover, the lack of political will has left these projects sitting on the drawing board. In addition, the British-inflicted ethnic rivalry, which dominates socioeconomic discussions in Pakistan, and prevents integrated nationwide projects from taking shape, is also a major impediment. For instance, the Kalabagh Dam, designed in 1984, never saw the light of theis still not built. day. The dam, to be located at the junction of Khyber-Pakhtunkhwa and Punjab on the Indus, would store water inside Punjab. The Sindhis did not allow this project to go through because they claim Sindh will be further starved of water, while the Punjabi agriculturists will benefit from the use of additional stored water.

According to some Pakistani engineers, the Kalabagh Dam, even it had been constructed, would have done little to hold these all-immersing floodwaters, and probably would have caused more misery by flooding the main Khyber-Pakhtunkhwa city, Peshawar, and beyond.

However, Tauseef-ur-Rehman, writing for the daily *The News* on Aug. 23, quoted engineer Fatehullah Khan, who said the country was in dire need of dams, and the government should take up the matter on a priority basis. He said the government should concentrate on Katzarah Dam, 20 miles downstream of Skardu on the River Indus, which has a storage capacity six times more than the Kalabagh Dam. "The current exceptionally high floods that created unprecedented havoc would have been mitigated, had Katzarah Dam, with a storage capacity of 35 million acre feet, been built in time," Fatehullah stressed.