

Institutional Development and Disaster Mitigation - Lessons Learnt

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Background



- In July- August 2007, rain floods occurred in Dadu and Qambar-Sahdadkot districts in Sindh, Pakistan.
- The British government when conquered Sindh in 1843, it experienced this disaster recurrently.
- It provided flood protection (FP) bund (protection embankment) along the border between Sindh and Balochistan to regulate the flood water safely

Background Cont...

- Minimizing the flood damages through main Nara Valley drain, disposing water in the Manchar lake and finally in the river Indus.
- Though the FP Bund's height was raised but it was not sufficient to stop the flood water overtopping it.



BALUCHISTAN

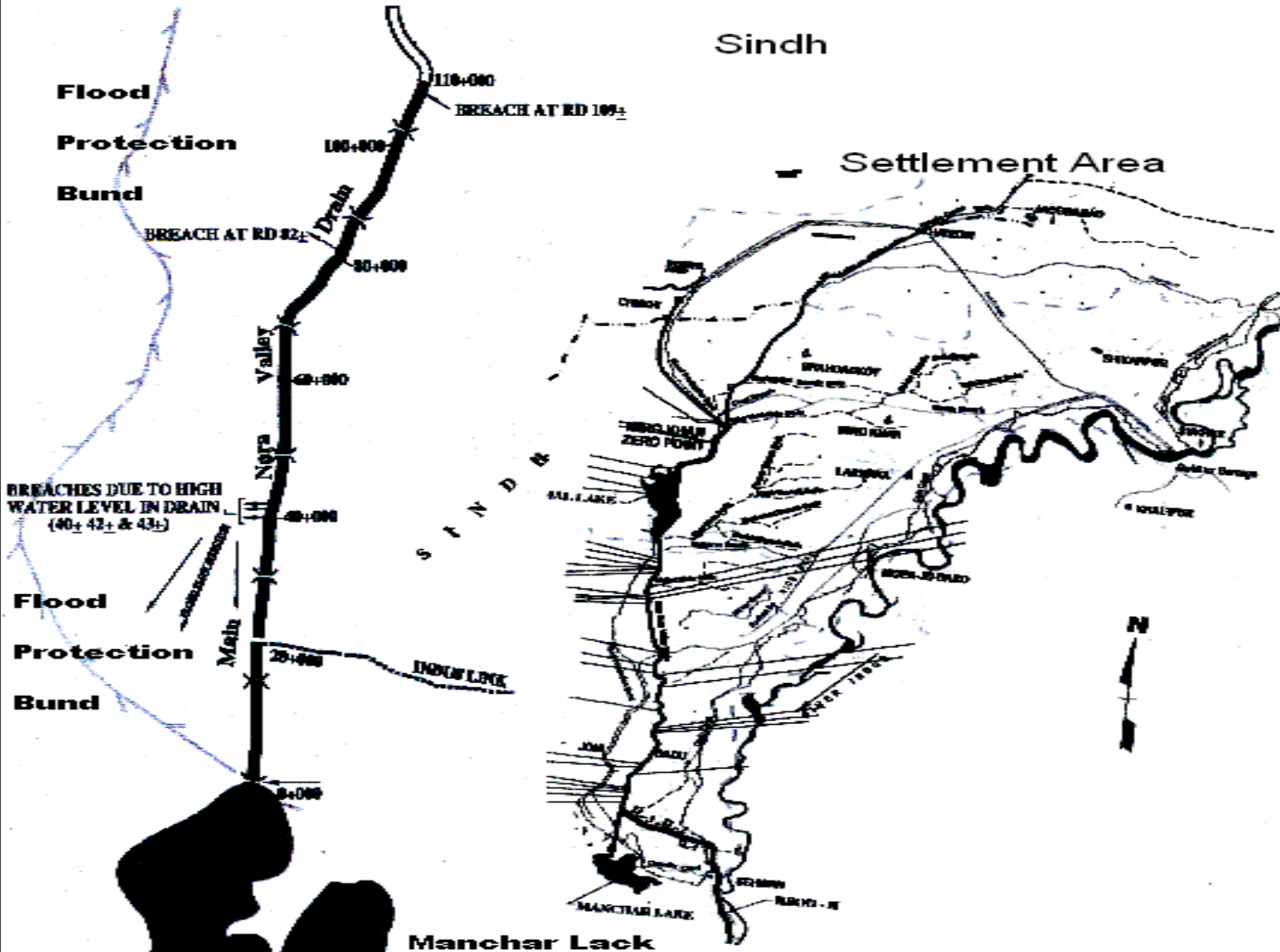
Sindh

Flood
Protection
Bund

Settlement Area

BREACHES DUE TO HIGH
WATER LEVEL IN DRAIN
(40+ 42+ & 43+)

Flood
Protection
Bund



Manchar Lack

Flood Damages



Losses	Qamber-Shahdadkot	Dadu
Villages affected	1,226	237
Area affected (hectares)	152,804	115,134
Cropped area affected (hectares)	19,323	26,607
Displaced persons	132,394	11,788
Population affected	137,544	253,644
Houses damaged	19,584	11,344
Livestock perished	40,136	41

Source: Relief Department, Government of Sindh, Hyderabad, 28 July 2008

Findings

- **After the British government left Sindh in 1947, no serious effort was made to study the climate changes and increasing flow of the rain water from the Kirthar Mountains**
- **Even the FP bund could not withstood the pressure of the flood water.**
- **That brought destruction of villages, displacement of people, ruining of their livelihoods, since the standing rice crop was wiped out.**



Findings Cont..

- **Relief goods though were adequately supplied but due to mismanagement, these were ineffectively distributed**
- **The concerned government organizations failed to face the mega disaster**
- **One could not see the TV footages of the affected people taking shelter in open spaces and waiting for food, water, clothes and shelter.**

Findings Cont..

- Like mismanaged relief distribution, rehabilitation also suffered due to weak government institutions.
- The people ultimately depended on their sources to survive.

Findings Cont...

- **The damages could have been decreased if the scientific planning had been done through institutional framework.**
- **Whenever heavy rains occur on Balochistan side, the rain water descends from the Kirthar mountains in Balochistan to the adjoining districts of Sindh, Jacobabad, Qamabar-Shahdadkot and Dadu districts**



Findings Cont..

Institutional failures:

- **No research on climate change and its impact on the disaster areas**
- **Lack of planning to manage the flood water disposing to the river Indus**
- **In case of breaches in the FP bund, poor planning to use technology to plug the breaches**
- **No awareness and training to people to be engaged in disaster management**

Findings Cont..

- **Lack of survey of locations to settle the people displaced by the flood**
- **No arrangement to move the animals to safe place with availability of fodder**
- **No plan to save the standing crops**
- **Lack of community mobilization to construct the houses at the safe level preventing from flood**



Findings Cont..

- **Inadequate flood studies to estimate the level of flood water and raising the FP bund**
- **Poor planning for relief and rehabilitation of the flood affected people**
- **Lack of master plan for sustainable disaster management in the affected area**



Recommendations

- **Kirthar disaster mitigation authority should be established for sustainable disaster management**
- **Planning is needed to dispose flood water safely through the drain and Manchar lake to the Indus river**
- **Information technology should be used for disaster relief and recovery**
- **FP bund be raised further to obstruct the flood water**

Recommendations Cont..



- **Training should be imparted to the communities on the disaster mitigation**
- **The people should be motivated to construct their villages on a higher level**
- **Resettlement plan should be made for rehabilitation of the displaced people**

Recommendations Cont..

- All stakeholders should be involved including donor agencies, NGOs, community organizations, and universities, in the sustainable disaster mitigation action plan
- Relief and rehabilitation operations should be undertaken with scientific planning and gender needs should be given special attention.





Thanks