

Erosion Wipes out Part of Bikrampur Heritage

The name Bangladesh has become synonymous with floods. Less is known about that insidious yet pervasive devourer of soil-river erosion. The devastations wrought by the two are so relentless and unsparring that records find it hard to keep pace with the visitations. Material losses and their impact on the physical parameters of Bangladesh can be measured, given a degree of sincerity and skill. But who would ever comprehend the human dimension of the so-called natural calamities. Man in Bangladesh is being constantly and perpetually buffeted between the extremes of excessive water and a literal famine of life.

Tajuddin, 60, does not know why the river is at his heels. Tajuddin, of South Dighali village under Lohajang thana, only knows that he had to suffer nine times due to river erosion. One day he built a house only to quit it on another day. Before the first of the nine erosions he was hit by, he had 15 acres of land. Now he is a landless rickshawpuller.

People of Lohajang Thana take pride in introducing themselves not as inhabitants of Munshiganj district but of Bikrampur. According to local people, the 'pargana' of 900 square miles now has been squeezed to 362 square miles by 'competitive' erosions of the Padma and the Dhaleshwari.

A thousand years back Bikrampur was home to Dipankar Atish, one of the greatest scholars and civilisers of man. The chain of illustrious sons and daughters of the soil continued till the days of the British Raj.

President of All India Congress and the leader of the 'Swaraj Andolon' — C. R. Das hailed from this area. Congress's first woman president Sarojini Naidu also hailed from Lohajang. Mahatma Gandhi paid a visit to Lohajang's Dighali bazar during the 'Non-cooperation Movement' and addressed a gathering in a local

Padma had been at it, naggingly over decades and decades. Now she has bagged a prized trophy — Dighali bazar has all but wholly gone under Padma's swirling waters. Dighali is now a study in devastation — almost like the morning after a cyclone has passed. Lohajang and its riverport occupy important places in our national becoming, forming as they do the heartland of the fabulous Bikrampur. With the passing of the centuries Bikrampur predominance in the material equations of the region also. But during the whole length of the British Raj this was the undisputed cultural and educational hub of the whole subcontinent. Bikrampur supplied writers, intellectuals and artists and an overwhelming member administration executives to the whole of India. The rise of the modern culture and society, first in Bengal and then all over the subcontinent, was the handiwork of Bikrampur. Our present has been largely shaped by this 'pargana' and in the future too we will continue to be influenced by Bikrampur's achievements.

A very important part of that Bikrampur went into Padma during the bright autumn days of September-October this year. Except for the affected local people no one seemed to have been concerned by this great loss. No one even moved a brick in an attempt to thwart Padma and save Lohajang. It seemed no one even thought of that. The government literally was in a deep slumber as far as the devouring of Lohajang was concerned. There was no monitoring, no warning — no one of any importance even went on a visit to the spot of the great national loss. The water scientists, the history and culture people did not even feel curious about the wiping out of the Bikrampur heartland. Today's Bikrampur is well past its glorious times. But still it is no place for paupers. In fact multimillionaire live here by the dozen. And politicians having national pull can also be tracked to Lohajang and Bikrampur and their number would also be astounding. In spite of all such, a part of national pride just plummeted out of existence — un mourned.

Rashed Mahmud Titumir and A K M Mohsin, Daily Star feature writer and chief photographer visited Dighali bazar at the peak of erosion devastations at the end of September.

sin committed by the people. So we saw them start special prayers and make sacrifices to propitiate their gods

The people near the Lohajang riverbank are brave. "I lost everything. But I will start afresh from scratch", said Karim, 25, who got married a year ago.

"We have been brought up with floods. So this is nothing new to us", says Karim.

Changes in Profession

Unlike other areas of Bangladesh, most of the inhabitants of Lohajang are not farmers in profession.

"I cannot recall the original profession of my forefathers," said Mohar Haldar, whose father came from Assam. He had heard that after coming from Assam, his father started working as a farmer. Later he turned into a fisherman.

"Now what would be my turn, I don't know", said Haldar. "Probably I have to go to Dhaka,

or anywhere, to find a job", added Mohar.

"I don't know where shall I go"

Bhojgaon is a village under Lohajang thana where the poorest of the poor live.

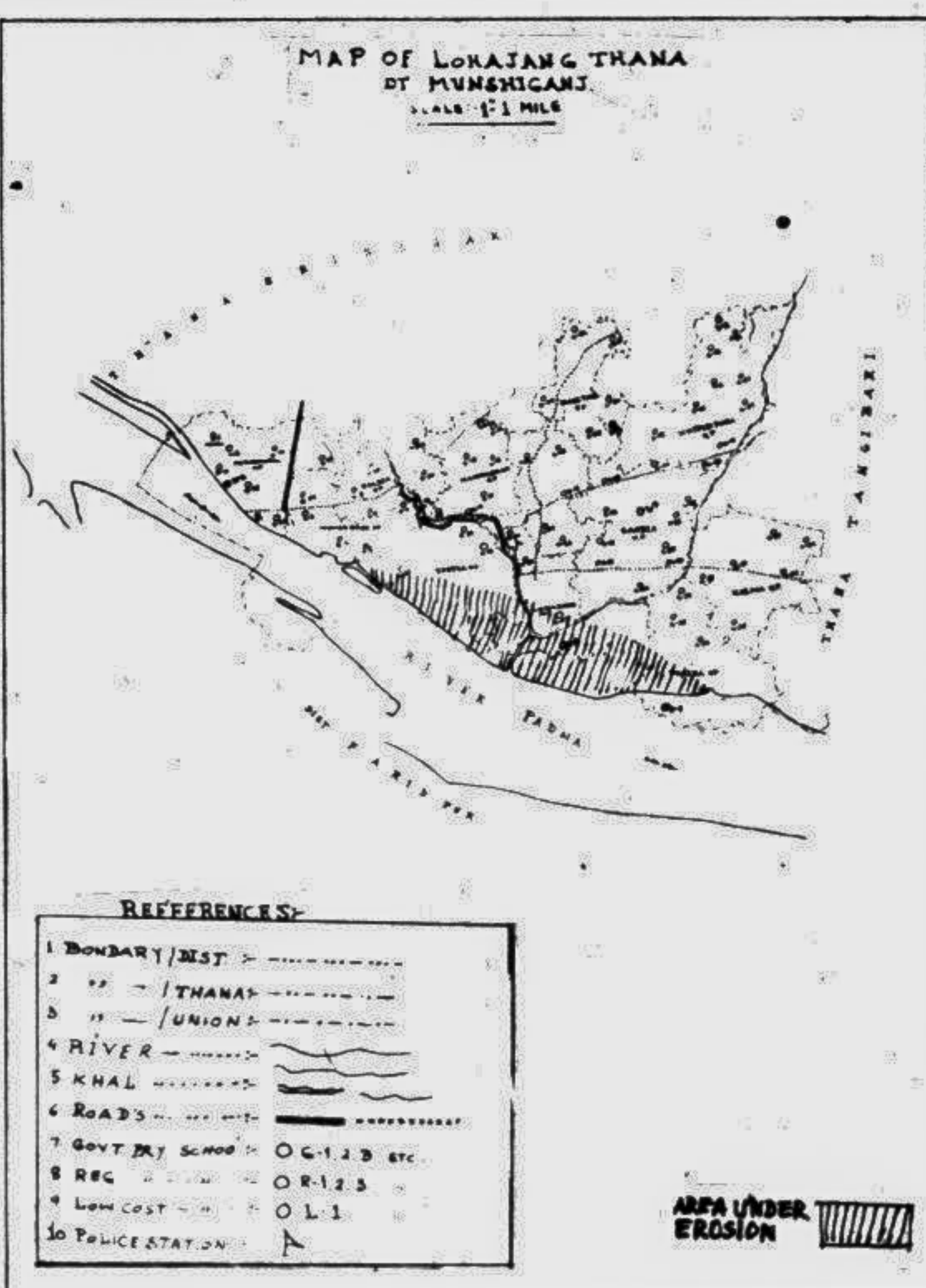
Hazera Bibi, 45, is a widow. Last year, her husband died soon after there was a spelt of big riverbank erosion. She had four sons and one daughter. The age of her eldest son is 16. He works as agricultural labourer, while her mother serves as a maid servant to relatively well-to-do families. This is how they are passing their lives. This year's flood has taken away their huts.

"Don't take my picture", said Hazera, "before telling me where shall I go".

Bangladesh is already overburdened with a growing number of people both landless and jobless. One estimate says that more than 50 per cent of the rural population are functionally landless. Out of the 85 million rural population, nearly 75 million are totally dependent on income from or paid work in agriculture. Natural calamities, like river erosion, only intensify this process of landlessness and pauperisation. The human cost of river erosion is colossal.

Geological Setting

The Ganges-Brahmaputra delta occupies Bangladesh and a small part of West Bengal in India. According to geologists, this delta is distinctive in that: (a) it is the world's largest in terms of area (90,000 sq. km), (b) it is fed primarily by the Himalayas, (c) its extremely fertile lands support a population



of the highest density in the world, and (d) its major drainage system — the Ganges is the most internationally disputed waterway in the world.

Extent of River Erosion

Given the small scale of most land holdings, any loss of land by a household is shattering. Each year river channel migration and severe bank line erosion, often coupled with flood, deprive thousands of households of their only source of livelihood. The demographic and socio-economic consequences of these are far-reaching and often enormous.

Severe flooding affects cropping regimes and damages or destroys standing crops. In normal flood areas, according to a study, some 18 per cent of the land is inundated, while in severe years close to 40 per cent is flooded.

The Riverbank Erosion Impact Study (REIS) conducted by Jahangirnagar University and University of Manitoba, Canada, shows that bank ero-

sion is taking place in about 94 thanas under 50 districts.

Consequences of Riverbank Erosion

The socio economic impacts of flooding result in the process of pauperisation displacement of population leading to village-to-town rural-urban migration and marginalisation of the peasantry.

The highly unstable nature of Bangladesh's river banks and channels also leads to, according to the REIS, land accretion. Accessibility to accreted lands by peasants, particularly the displaced farmers, is limited by local level politics and power structure.

Small land owners consistently appear to be losers, while large land owners gain control through violence.

Therefore, it extends and intensifies a near feudal patron-client relationship that governs the society and economy throughout most of the riverine areas in Bangladesh.

The REIS points out that the government response to this and related problems at local,

regional and national levels has been limited to date.

However, the study notes that there has developed an increasing awareness of the severity of the problem in recent years.

Possible Solutions

The professionals on the job of formulating solutions to the riverbank erosion problem in Bangladesh are not in consensus. The engineers put more emphasis on structural solutions, while others think that the problems can be mitigated only through an inter-disciplinary approach.

Structural Solutions

Structural solutions call for the engineering of structures, such as embankment along rivers, dams, drains, reservoirs, and other structures designed to control the natural flow of rivers.

A megascale structural solution to the flood problem in Bangladesh is now underway, sponsored by 17 donors and coordinated by the World Bank.

The plan, under its brand name Flood Action Plan, calls for the construction of hundreds of kilometers of tall embankments along the rivers, enormous drains, and compartments of the flood plains.

According to 'The Control of Nature' by MacPhee, the structure of the embankments under the proposed megaproject in Bangladesh is similar to those built along the lower Mississippi River in the USA. Despite enormous expenditures for annual maintenance and very close monitoring by the Army Corps of Engineers, the Mississippi embankment project has proven

to be a complete failure. The embankments were nearly wiped out during the floods of 1973, 1984, and 1993.

Geologic Solutions

Riverbank erosion is a part of the overall hydrodynamic process active in the entire region.

According to Khaliquzzaman of University of Delaware, USA, the geologic solution is more farsighted in nature.

Dredging and Re-excavation of Rivers

The experts feel that continuous dredging of the rivers and channels and dispersion of the dredged sediments on the delta plain will not only increase elevation of the land, but also will increase the capacity of the rivers.

There has been a recent increase in the amount of total suspended and bedload discharge of the Brahmaputra river due to massive deforestation of the Tibetan and Nepalese slo-

pes. According to Khaliquzzaman, the recent increase in sediment discharge has caused the river bed level to rise about five to seven metres, which decreases bankfull stage and increases its flooding propensity. If dredged and dispersed properly, according to him, this extra source of sediment can help the delta to grow.

Preventing Land Degradation

The experts also feel that farmers can be advised to leave a few inches of stem remaining from their rice crops during harvesting before the rainy season. They also urge upon the farmers to provide more information about the problem of soil erosion.

Preparedness and Indigenous Solutions

According to the experts an understanding of how individuals have adapted to and are affected by riverbank erosion may suggest new and less costly ways of reducing damages.

Indigenous solutions, such as the building of suitable housing, shelters and infrastructures, according to the experts, also deserves serious consideration.

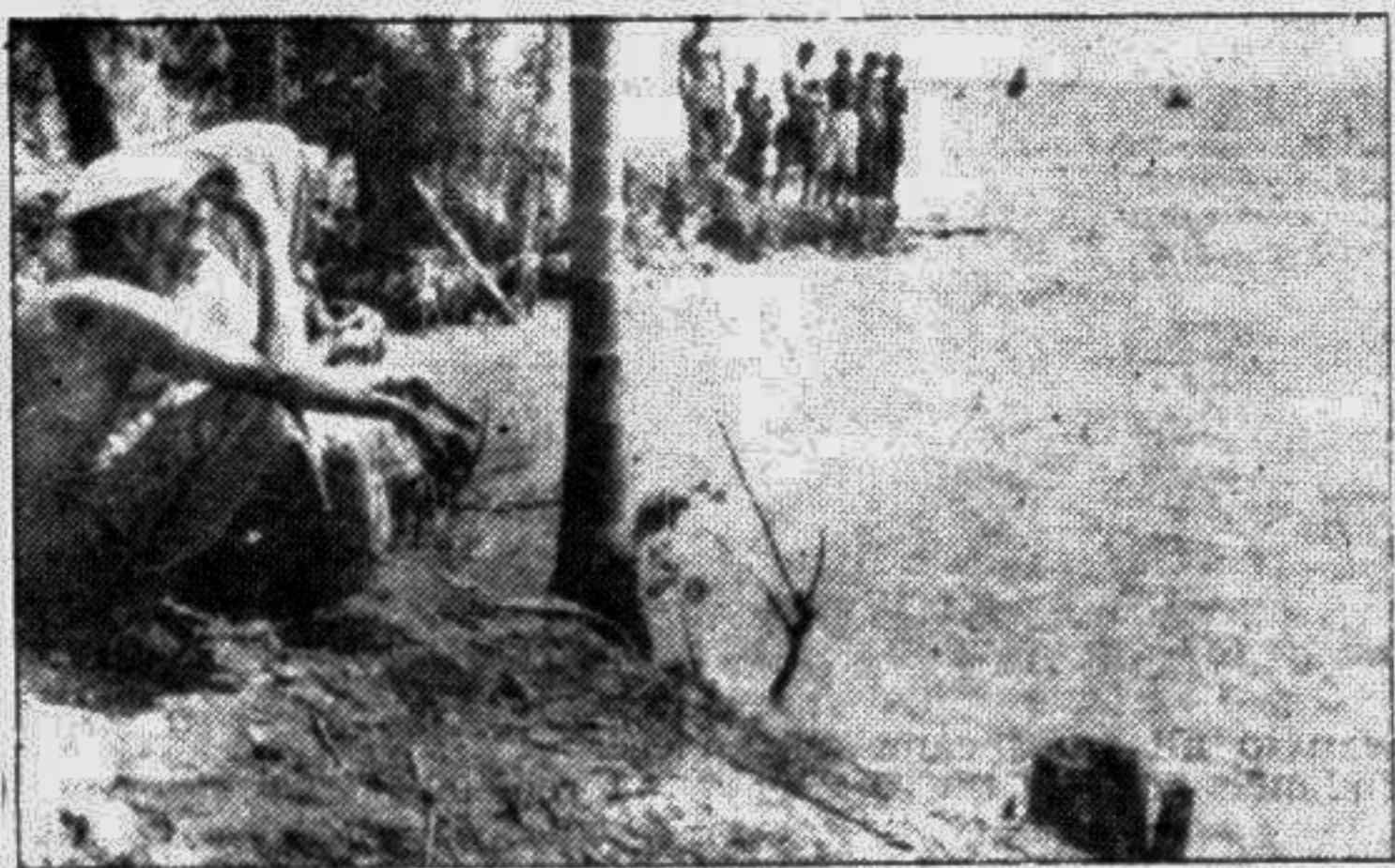
It is widely believed among the experts, without regional cooperation between the co-riparian nations, any major development in flood and erosion control is almost impossible.

Political Commitment

In order to determine the factors responsible for and the way out from the aggravating problem, the political will is essential. According to the experts, this is the only factor which combines both the necessary and sufficient conditions. They remain skeptical about how it was and is shaping.

Conclusions

During June-September, with the commencement of yearly monsoon rain, flood and bank erosion appear as a con-



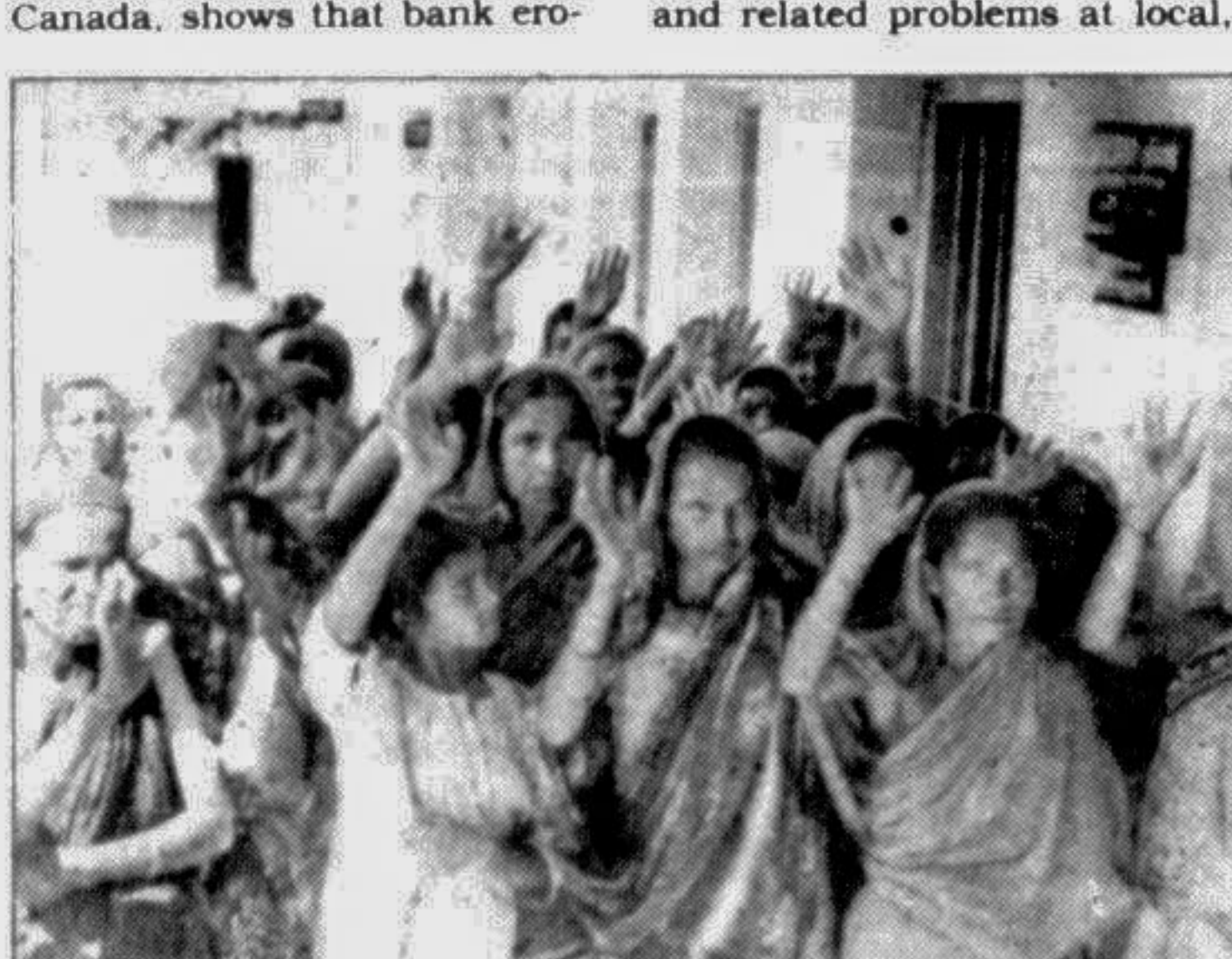
There stood their homestead — just the other day



When the provider devours — where to seek a solace?



For them, no more exist the house they lived for generations



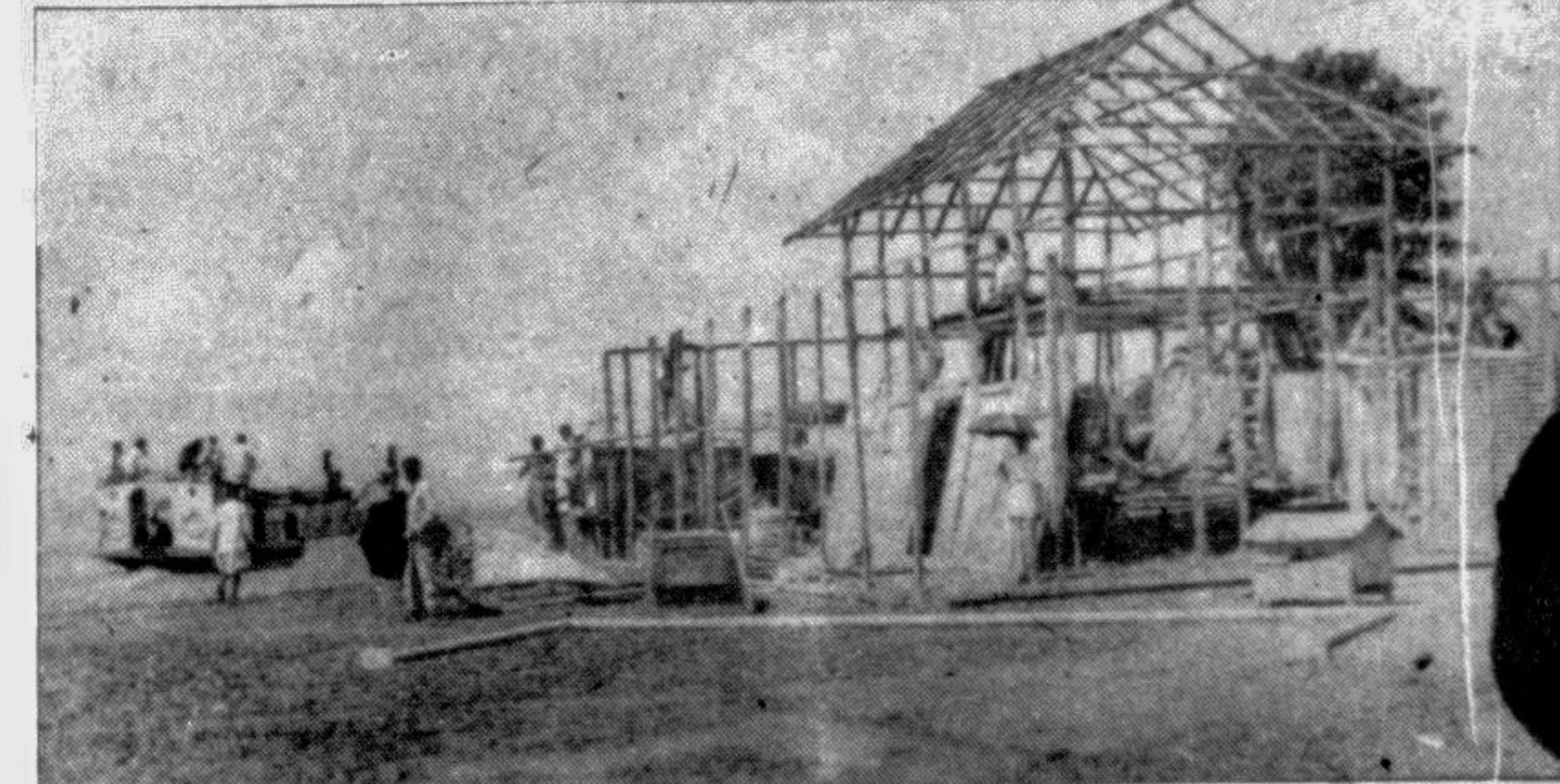
The homeless yearning for relief



That was the yard of his sweet home — he never thought of falling the favourite tree that stood in the midst providing shade and fruit.



The river erodes and devours their homes and heart; frantically they shift — but where...?



Houses are rebuilt, but again of the riverbank: — will they survive the fury next year?

Consequences of river bank erosion in Lohajang at a glance

Name of the Union	Total Population		Numbers of affected people			Numbers of Affected Building			Numbers of affected hours (Complete)		Affected cultivable land		Affected Roads		Affected Embankment		Affected Trees	
	Male	Female	Male	Female	Nos of Family	Partially	Complete	Value in lakh Tk	Nos	Value in lakh Tk	Acre	Value in lakh Tk	Km	Tk	Nos	Tk	Nos	Value in thousand Tk
1 (a) Lohajang (excluding Dighali bazar)	5084	4992	NA	NA	410	3	2	20	1000	100	700	700	5	25	-	-	1,000	1,000
1 (b) Dighali bazar	-	-	-	-	-	-	2	10	600	1200	205	600	1.5	15	-	-	20	20
2. Teuria	4996	4951	NA	NA	400	-	-	-	900	90	6500	650	3	15	1	1.5	500	500
3. Kumartbhog	6633	6214	NA	NA	350	-	-	-	800	80	425	425	1	5	1	2	300	300
4. Dhainda	5253	4568	NA	NA	300	-	1	1	700	70	475	475	1	5	-	-	150	150
5. Medinimandai	6651	6846	NA	NA	40	-	-	-	50	5	50	50	-	-	-	-	10	10

Source: Compiled from Union and thana estimates

NA = Not Available

spicuous feature in about 40 of Bangladesh's major and minor rivers.

It is estimated that about one million people are directly affected each year by bank erosion in the country. Suffering from this natural hazard, most of them end up as landless displaced persons. The total monetary loss is estimated to the tune of 20 billion taka a year. The displaced populace not only tend to inflate the proportion of landlessness and unemployment but also deteriorate the local human environmental conditions in a significant way.

Many lessons were learned and were prescribed. But none of these has yet come to avail the nation anything at least till now. The human material at the micro-level is good and ready to take the challenge but the national will, so necessary to make a giant heave of it all, is so far missing.