

# Occasional Paper Series of the Project on

### **Environmental Change and Acute Conflict**

A Joint Project of the University of Toronto and the American Academy of Arts and Sciences

## Pressure Points: Environmental Degradation, Migration and Conflict

by

Astri Suhrke Chr. Michelsen Institute

## Bangladesh and Assam: Land Pressures, Migration and Ethnic Conflict

by

Sanjoy Hazarika The New York Times



International Security
Studies Program

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#### Note to the Reader

In 1990, the American Academy of Arts and Sciences and the Peace and Conflict Studies Program of the University of Toronto initiated a project, "Environmental Change and Acute Conflict," to investigate how environmental degradation and the depletion of natural resources might contribute to social strife and conflict in many parts of the world.

Under the direction of Dr. Jeffrey Boutwell (American Academy), Dr. Thomas Homer-Dixon (University of Toronto), and Dr. George Rathjens (Massachusetts Institute of Technology), the project undertook a series of case studies and conferences in 1991-92. During this period, researchers examined the links between environmental change and conflict in three areas: water scarcity, population displacement, and the economic repercussions of reduced agricultural and resource productivity. A total of more than forty participants from ten countries have contributed to the project.

These two papers on the interplay of environmental change, population displacement, migration, and conflict were first presented at a workshop on "Environmental Change, Population Displacement, and Acute Conflict," held at the Institute for Research on Public Policy in Ottawa in June 1991 (see list of participants on page 66). Dr. Astri Suhrke's paper questions whether migration stemming from environmental degradation has resulted in significant conflict. Sanjoy Hazarika, a foreign correspondent for *The New York Times*, provides a personal account of the human impact of environmental problems in the regions of Bangladesh and India. Jane Willms and Tad Homer-Dixon of the Peace and Conflict Studies Program deserve special thanks for their extensive help with these papers.

This Occasional Paper is the third in a series to be published from this project. The first in the series examined the potential for conflict over water resources (Peter Gleick) and the relationship of water degradation and scarcity to the Israeli-Palestinian conflict and the prospects for a peace settlement in the Middle East (Miriam Lowi). The second in the series focused on China, examining the problems of environmental degradation, economic productivity and conflict (Václav Smil) and long-term historical patterns of environmental decline and political conflict (Jack Goldstone). The last issue in this Occasional Paper series will address the social conflict engendered by a rapidly deteriorating environment in the Philippines (Celso Roque and Maria Isabel O. Garcia).

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Comments and opinions from our readers are most welcome, and can be directed to Dr. Thomas Homer-Dixon, or Dr. Jeffrey Boutwell (see inside back cover for addresses).

Laura Reed Editor

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### Bangladesh and Assam: Land Pressures, Migration and Ethnic Conflict

## Sanjoy Hazarika The New York Times

In many parts of the world, land scarcity contributes to illegal migration and ethnic conflict. But in few regions are these connections so vivid, painful, and divisive as they are in Bangladesh and the northeast Indian state of Assam.

A flow of races, languages, cultures, religions and subnationalities meet in the Northeast of India in a melting pot that has spawned guerrilla wars and agitations for the protection of these identities. Yet, the region that comprises the combined basins of several great rivers — the Ganga, the Brahmaputra and the Barak — is home to one-tenth of humankind. B.G. Verghese, a senior Indian journalist, remarked that one of the hopes of improving the condition of hundreds of millions who live here lies in a "well-conceived integrated programme designed to uplift the marginal man [sic] in what remains the largest concentration of global impoverishment despite being blessed with great gifts of nature."

The contribution of land and resource scarcity to the outbreak of ethnic conflict is readily apparent on the Indian subcontinent. The January 1993 riots in Bombay, which took a toll of more than 660 lives and devastated large parts of India's most important commercial center, go beyond Hindu-Muslim clashes. The riots involved issues such as illegal tenants, new migrants from the countryside and powerful lobbies of slumlords and builders seeking to evict these tenants and squatters to sell properties and buildings at a premium.

The problems of social tension and sectarian suspicion are fuelled by other questions, including the burgeoning population and the strain on common resources and facilities such as drinking water, power and sanitation. Both Bangladesh and India have failed to curb their population growth, despite high mortality rates. This factor, as much as the lack of political will and official zeal to curb population growth, has put greater pressure on renewable resources.

<sup>© 1993</sup> by Sanjoy Hazarika. This paper was prepared for the workshop on "Environmental Change, Population Displacement, and Acute Conflict," held at the Institute for Research on Public Policy in Ottawa in June 1991 as part of the "Environmental Change and Acute Conflict" project of the Peace and Conflict Studies Program, University of Toronto and the American Academy of Arts and Sciences, Cambridge, Massachusetts.

Funding is inadequate to meet birth control targets but more importantly, the initiative and drive at the grassroots level are missing. Religion and tradition are important cultural factors which inhibit population control in societies where a son is still favored over a daughter and children are seen — although this view is changing too — as insurance and providers for people in their old age. Women face discrimination too, especially in the northern and central states of India where they are largely illiterate and have no income of their own; this lack of status contributes to their lack of control over the number of children they produce.

#### Land Pressures in Bangladesh

Bangladesh represents one of the most brutal and hopeless statements of the human condition. The vast population that resides in the fertile basin of the Brahmaputra and Ganges rivers reaps few rewards for its great labor. The benefits of development funding reach only a small minority: large amounts are appropriated by corrupt officials, village power-brokers, politicians, and military personnel. There are a few successful innovative schemes like the Gramin Bank, a rural bank that has developed branches nationwide and lends money only to the poorest, but these successes are rare.

"The economic viability of Bangladesh has long been in question because of its over-population, poor natural resource base, vulnerability to natural disasters and undiversified economy dependent on the production of two crops, rice and jute," says Dr. Mahabab Hossein, one of Bangladesh's most prominent development economists who heads the Bangladesh Institute of Development Studies in the capital, Dhaka.<sup>2</sup>

In numerous respects, Bangladesh represents the Malthusian night-mare: too many mouths to feed and too little food, or too many people on too little land. The population of 115 million continues to grow at an estimated pace of between 2.2 and 3 percent per year. It has doubled in the past thirty years. The country's population density of 785 per square kilometer is the world's highest.<sup>3</sup> Bangladesh is one of the poorest nations in the world, with a per capita income of less than 170 dollars per year, half that of India. The country has struggled to increase its per capita income, but in 1986, half of the population still had inadequate energy intakes and 58 percent of rural children and 44 percent of urban children suffered from chronic malnutrition. The infant mortality rate was about 110 per thousand, one of the highest in the world. Less than one-third of the adults were literate, and although three-quarters of the children enrolled in primary school, two-thirds of them dropped out before secondary school.<sup>4</sup>

Nearly 80 percent of the agricultural land is already covered by rice, and nearly 60 percent of the country's investments are financed by foreign aid. The growth in population has led to a situation where the average farm holding is less than one hectare (or less than 2 acres). Despite their lower costs, high-yielding modern varieties of food grains have not been introduced

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to all areas where they would increase productivity. By one estimate, such varieties now cover 40 percent of the cereal-growing areas, but their potential remains largely unexploited because of flooding. Estimates indicate that if irrigation were extended to 62 percent of the cultivated area, food-grain production would reach the level of 30.7 million tons, a vast leap over the current level of 18 to 19 million tons. This output could feed an estimated 185 million people at current levels of food intake.<sup>5</sup>

The story of Mugha ul-Khand, a former village headman, is a clear example of the trauma that accompanies the growing scarcity of cropland and the lack of new land frontiers. A bearded old patriarch, ul-Khand lives in the village of Modhupur, 90 miles north of Dhaka, the capital of Bangladesh. When I visited him in February, 1991, his small enclave was surrounded by parched fields. In normal times, these fields would have been abuzz with the hum of diesel pumps pouring water across the wheat fields. But now they were quiet because of a diesel shortage caused by the Gulf war. The family land usually grows barely enough wheat, rice, and vegetables to satisfy household needs. A small surplus of cereal is sold in the village market or to traders from the city who visit during harvest time.

Mugha ul-Khand said his family had lived on this land for at least three or four generations. He asked: "What will we have left one or two generations from now? Perhaps something, perhaps nothing. For us, it is a question of survival. We will go anywhere because every year our land holding is shrinking, our families are growing. My father had twenty-four bighas of land; now my four sons have two bighas each. [One bigha equals approximately 0.35 acres or 0.15 hectares.] What can you grow on two bighas? In the future, we may have nothing. Yes, we will be prepared to go anywhere. To Assam, if necessary, if we can get land and live with dignity. But will the Assamese have us? There are man-made frontiers and prejudices." The younger ul-Khand said "we live by our wits in this country, for the land, despite its richness, cannot feed us any longer." Debts grow, families grow, but incomes from land holdings and the buying power of the Bangladeshi currency shrink.

One of the other sons remarked that many young women from the village, especially unmarried ones, have left to seek a better life in the larger towns and cities. Every year, he says, the number who leave is increasing. Some are reported to have turned to prostitution to survive. The flight goes beyond the country's boundaries. Many maid servants in Calcutta and other towns and cities of the Indian state of West Bengal are from neighboring Bangladesh; so are many male construction workers and farm laborers.

B.G. Verghese, the Indian writer, contends that:

The Ganga-Brahmaputra-Barak basin has all it takes to be a granary. Its agricultural record has however been disappointing. Malnutrition continues to affect morbidity and productivity within national boundaries and the movement of refugees across international borders. This erosion of human resources, often of able-bodied men or the most venturesome among the populace,

Debts grow, families grow, but incomes from land holdings and the buying power of the Bangladeshi currency shrink. has further undermined agriculture in the exporting areas even as it has aroused sensitivities in the importing regions.<sup>7</sup>

Those who migrate are not interested, says Verghese, in agriculture, but in jobs that give them an income, a basis for survival. The attractions of more lightly populated lands across the borders are immense. Bangladesh has a population density estimated at 785 per square kilometer. The density of population in India's northeast is far less. Assam's is 284 per square kilometer; the figures are 78 for Meghalaya, 262 for Tripura, and 33 for Mizoram. West Bengal, however, has a reported density almost on par with Bangladesh: 766 per square kilometer, the highest among all major states of India. India.

Bangladesh maintains officially that its nationals prefer to go to the Gulf where there are opportunities, rather than to India which can offer little. Yet, most do go to India because as unskilled laborers, they find a ready market in the subcontinent for maids, building workers, and porters. Bangladeshi journalists and officials privately acknowledge the fact of continuing out-migration. While economic conditions in the bordering Indian states of West Bengal, Assam and Meghalaya may not be ideal, they are better than conditions in Bangladesh. Land and work are available. Bangladeshi intellectuals sometimes justify the outflow by saying that the world needs a New Demographic Order that enables nations with plentiful, cheap labor to send their workers across international boundaries.

There are two basic factors that favor an immigrant moving from Bangladesh to northeastern India. One is that the migrant speaks Bengali, the language of the Indian state of West Bengal and of most of Bangladesh. Bengali is spoken by more than 170 million people in the region, making the Bengalis one of the largest linguistic groups in the world. Language gives access to jobs, property and education. A second factor is that many migrants have relatives on the other side of the border.

An example of this cross-border mobility is the case of Rafique Sarkar, an insurance agent who is 36 and lives in Mymensingh, Bangladesh. This is a town of narrow, unkempt lanes, weary-looking buildings dating back to the British era, and crowds of people on the sidewalks. Sarkar and his wife live in a small flat on the first floor of an aging house. They originally came from the town of Hoogly, a part of the sprawling city of Calcutta, the capital of the Indian state of West Bengal. Sarkar came to what was then East Pakistan with his brother-in-law in 1967, who lived in Mymensingh. His mother also chose to live in East Pakistan, preferring an Islamic nation to predominantly Hindu India. But his father stayed on in the Calcutta area. They visit their relatives clandestinely, and no one has ever checked or stopped them.

When the subcontinent was partitioned in 1947 into India (predominantly Hindu) and Pakistan (predominantly Muslim), the native Bengalis in East Pakistan (formerly East Bengal) chafed at domination by West Pakistan. A popular uprising in 1970 was crushed by a brutal Pakistani army crackdown. Backed by India, the Bengalis launched an insurgency movement, and

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then, when more than 10 million East Pakistani refugees had crowded into India, New Delhi launched an offensive that gave birth to the new nation of Bangladesh.

Sarkar says that during the Pakistani army crackdown, 60 percent of Mymensingh's population of about 200,000 left for India. They stayed with relatives or in refugee camps. Sarkar went to his relatives in Hoogly and, like a majority of the refugees, returned home after the war was over and Bangladesh was born. But there were many who did not return and, according to Sarkar, they were predominantly Hindus. Now, Sarkar says, "the political and economic environment is better in India; we may even go back." Sarkar's example illustrates the ease with which a Bengali speaker from Bangladesh can merge into Bengali-speaking areas of West Bengal and northeast India. The task is made easier if the immigrant has relatives in the area who can immediately confer on him a degree of social acceptability.

Out-migration has been a perennial feature of East Bengal since before the end of the British Raj; it continued through the years of East Pakistan and post-partition; and it continues today from Bangladesh across the borders of eastern India. More than anything else, the migrants are fleeing the poverty-related degradation of their lives that has given them little choice but to leave their homes for another land.

According to one estimate, population growth in Bangladesh will slash in half the amount of cropland available per capita by 2025. <sup>12</sup> This crisis is worsened by the fact that all of the country's good farmland has already been heavily exploited. "At about 0.08 hectare per capita, cropland is already desperately scarce," says the study. <sup>13</sup> "Flooding and inadequate national and community institutions for water control exacerbate the lack of land and the brutal poverty and turmoil it engenders."

#### The Trauma of Flooding

The poverty of Bangladesh is in no small way attributable to the region's vulnerability to natural disasters. Bangladesh seems to move through an unending cycle of floods, cyclones, devastation, death, drought and famine. Marauding rivers burst their banks and change course with impunity, and heavy silting raises the level of river beds and increases the size of the flood plains, wiping out entire villages and reducing even the moderately affluent to penury. More than one million people have been killed by floods since 1961. And the 1988 floods, the worst in recent memory, reduced rice production by 1.6 million tons and caused 1.3 billion dollars worth of damage to roads, railroads, houses and industrial machinery. 15

Floods, however, are a necessary evil. They renew the land. Bangladesh's intensive cultivation depends on silt deposited on the flood plains by water-gorged rivers in the rainy season. "The floods are essential to maintain the fertility of the soils, to replenish the groundwater and soil moisture for the winter season, to help maintain the extensive fisheries . . . and to provide plentiful water to the monsoon crops. In normal years floods do all these

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things without causing havoc." On the other hand, experts in Bangladesh agree that the single most harmful environmental factor in the country is flooding. It has led to temporary and permanent migrations, not only across districts, but also across international frontiers. 17

Verghese describes the scale of the flooding: "A huge monsoon flood discharge, draining over 1.5 million square miles in five countries straddling both sides of the Himalayas and containing far and away the highest rainfall density zones in the world, funnels into the sea through the Bangladesh nozzle comprising barely 7.5 percent of the total basin. No other country anywhere faces a flood problem of the nature and magnitude that Bangladesh does." <sup>18</sup>

The great flood plains begin at the foothills of the Himalayas in West Bengal and Arunachal Pradesh and roll through Assam, the plains of Bengal and Meghalaya and into Bangladesh and the mouths of the Ganges. The Ganges is joined at various times along its long route by the Kosi and the Gandhak from Nepal; the Brahmaputra is fed by the Subansiri, the Dibang, Kameng and Luit in Arunachal and then by the Barak and the mighty Meghna.

The human factors in downstream flooding include growing human settlements and encroachments near river banks. In the flat valley areas, the natural drainage systems have been wilfully blocked, embanked or dammed; natural depressions and wetlands have been encroached upon and reclaimed for agriculture. Embankments designed to keep floods out often create a nightmare by trapping flood water within vast areas for months, especially in Northern Bihar state. This makes both cultivation and settlement of the land impossible. Road construction also changes the landscape. Roads are often the only high ground in lowlying areas, and building them involves moving millions of tons of soil and can make low-lying areas more vulnerable. Landslides upstream, which contribute huge amounts of silt to rivers, are caused by weak soil structures, unstable rock formations and human activities such as the building of roads, bridges, and drainage channels that change a region's geography.

Yet, despite the annual crisis brought on by flooding — and exacerbated by human settlement and development — there are ways in which the rivers' capacity for destruction can be reduced if not stopped. These steps include soil conservation, better agricultural and irrigation planning as well as upstream reforestation in the Himalayan foothills. Water catchment areas in the lower and medium Himalayas on a massive scale is another idea that engineers have been studying for some years.

During the annual floods, the country is virtually trisected into three nations, each with the raging waters of an angry river as its natural frontier. The Meghna, Brahmaputra and Ganges divide the eastern, northern and western sectors during the flood season better than any artificial boundary. Floods cover the countryside like a vast sheet, often under a meter or two of water. One estimate says that one-third of Bangladesh is covered by floodwaters every summer. It is impossible to grow even tall rice in such high

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water, which forces people and livestock to migrate to higher ground; to neighboring, higher, better-protected villages and towns; to regions inside the national frontiers where land is available; and across the international frontier.

Nature's raw power is seen when rivers deviate from traditional courses, slashing through soft soil and forging a new trail of devastation. The Centre for Science and Environment (CSE), a leading Indian environmental research group, says in a new report that the fragile seismic structure and ecosystem of the Himalayas is one of the biggest factors causing downstream floods and natural disasters. As the youngest mountain range in the world, with occasional earthquakes that kill hundreds of people, destroy property and cause enormous siltation of fast-flowing streams and rivers, the Himalayas are "naturally primed for disaster." The CSE notes:

The Himalayan mountains (are) the youngest in the world, lashed by intense rainstorms and highly seismic . . . floods therefore are inherent to the ecology of the flood plains of the Indus, Ganga and Brahmaputra . . . the afforestation of the Himalayan mountains can reduce the problem of floods in submontane plains only to a minor extent . . . there is no evidence to believe that ecological solutions like afforestation will control floods any more than engineering solutions like dams and embankments . . . . People in the plains will have to deal with floods whether the Himalayan ranges are covered with forests . . . . Secondly, ecological changes that have taken place in the lowlands themselves, because of technological interventions to control floods and encroach upon the flood plains, have exacerbated the problem far more than the ecological changes in the mountainous uplands. <sup>20</sup>

Water and silt move out of these mountains in explosive waves. Floods and the shifting of river courses are therefore inevitable. The CSE report explains: "Afforestation will . . . have a limited impact in terms of changing hydrological conditions . . . . In other words, forests can moderate minor and medium floods. But human society will have to live with major floods."<sup>21</sup>

The Brahmaputra of Assam is cited as an example. Its northern tributaries flow through more densely forested areas than its southern ones. Yet it is the northern tributaries that cause more flood havoc. They have steep slopes, shallow and braided water channels, and coarse sandy beds; they carry a heavy silt load and are prone to cause flash floods. Natural factors such as major earthquakes have played a critical role in determining the geography of the region, dwarfing human efforts to control the waters. The great Assam earthquake of 1950 changed the course of major tributaries of the Brahmaputra and raised the bed of the river and its tributaries by several feet. The low water levels of the main river at Dibrugarh rose nearly 10 feet and the bed of the Dibang was raised by nearly 20 feet. This resulted in acute flooding downstream and severe erosion of the banks.<sup>22</sup>

The fragile seismic structure and ecosystem of the Himalayas is one of the biggest factors causing downstream floods and natural disasters.

Bangladesh must also contend with tidal waves that sweep the southern coast every year between April and December, rising nearly 20 feet high at times and smashing storm shelters, villages, bridges, and killing tens of thousands of villagers. Some specialists say that global warming could make this much worse in the future. Although experts debate whether or not major climatic change and a rise in the sea-level will occur, most agree that large sections of Bangladesh's coastline are exceedingly vulnerable to inundation by sea water.

A study by Jehangirnagar University, Dhaka, says that 18 to 19 million people are affected by flooding in Bangladesh each year.<sup>23</sup> "The displacees of the river bank erosion are the most wretched of the landless poor," according to Rahman who describes them as totally dispossessed and is critical of donor nations for failing to develop policies to assist these groups.<sup>24</sup> Verghese notes that the continued misery provoked by flooding permanently depresses the economy of flooded areas, and there is thus "little incentive to depart from traditional agricultural practices."<sup>25</sup>

The floods of the Gangetic Basin constitute a warning to administrators, farmers, scientists and planners: they mean, in part, that the communities of the lowlands must learn to develop flood plains without merely relying on devices such as embankments. Flood-plains management on much of the subcontinent is weak. Few agencies, either in government or outside, have studied and developed ecologically sound management systems. Of the total area of 8.28 million hectares vulnerable to flooding in Bangladesh, for example, only 32 percent were protected by 1984-85 and 5.7 million hectares were still at risk.<sup>26</sup> The government wants to raise the level of protection to more than 40 percent during the 1990s. But managing the flood plains, the CSE report points out, is an extremely difficult task because of population densities and largescale landlessness. Resistance to new management practices is widespread. The effort must be launched, however, to help the inhabitants of this great, rich and diverse region live in harmony with nature, adopt self sustaining strategies with regard to natural resources and work toward a marriage of big and small technologies, engineering skills and plain common sense.

#### Migration from Bangladesh

#### The Scale of Migration

The migration from East Pakistan/Bangladesh to India has resulted in the creation of a sub-nation the size of Australia within India. This population of between 12 and 17 million has moved illegally, without proper visas, passports or documents, and it has settled in northeast India.

The exact extent of out-migration from Bangladesh (formerly, East Pakistan and before that, East Bengal) to India may never be known. Accurate determinations are hindered by many obstacles. Voting rights, ration cards,

Eighteen to nineteen million people are affected by flooding in Bangladesh each year. and property deeds are held by illegal migrants. Census methods are flawed, the Indian census asks people to name their place of birth, and while some honestly report their birth place as Bangladesh or Pakistan, most do not, worried they may be ousted or submitted to police questioning.

Language also presents a major problem in gathering statistics on migrants. In the 1971 census, Assamese speakers were listed at 8.9 million of Assam's 14.2 million population. People who spoke Bengali as their "mother tongue" were listed at 2.9 million.<sup>27</sup> It is widely accepted that the number of Assamese speakers was exaggerated because many migrants or their descendants gave Assamese as their main language instead of Bengali for fear of being harassed by police and evicted.

Religious affiliations, on the other hand, are generally regarded as being more helpful than language in accurately determining the growth of the population of immigrants and their descendants (mostly Muslim), as well as the decline in the native Assamese (mostly Hindu). But figures from the 1991 census will not likely be available for at least one or two years.

In spite of these difficulties, rough estimates are available of the numbers of migrants moving over the years out of Bangladesh and into northeast India. A significant study by Sharifa Begum, of the Bangladesh Institute of Development Studies in Dhaka, represents the first semi-official acknowledgement by Dhaka of the size of the migration problem. According to Begum, between 3.15 and 3.5 million people migrated from East Pakistan to India between 1951 and 1961. And between 1961 and 1974, another 1.5 million migrated. A national census was conducted in 1961 and 1974. The 1974 census was the first in independent Bangladesh. The latter figure is based on census figures and incorporates estimates of deaths from the 1970 cyclone and from the Bangladesh liberation war.<sup>28</sup> But it appears to be a conservative estimate for it does not take into account the 10 million who fled the repression of the Pakistani Army in 1970 and 1971 before an Indian military victory allowed them to return home. Most of the migrants returned; yet nearly a million (believed to be mostly Hindus) stayed in India, apparently blending into the countryside. All this adds up to an outflow of 6 million in the 23 years between 1951 and 1974.

In a more recent paper, Begum states that although statistics for migration are not available after 1974, there is no valid reason to suggest that migration ceased at that time. <sup>29</sup> She adds that in fact there are indications that Bangladesh lost a substantial proportion of its population from 1974 to 1981 due to migration and famine. Marcus Franda, the South Asian scholar now with the University of Maryland, suggests that the rate of out-migration from Bangladesh actually increased in the 1970s. Franda noted in 1981 that Indian government sources believed that the number of immigrants into Assam was more than 600,000; to Maghalaya more than 300,000; to Tripura more than 200,000. By early 1979, he found that more than half the total population of 3,000,000 of the Nadia district in West Bengal were refugees from Bangladesh. <sup>30</sup> In 1974 and 1975, Bangladesh was devastated by a famine that affected millions of people and sent the destitute to seek shelter wherever

Between 3.15 and 3.5 million people migrated from East Pakistan to India between 1951 and 1961. And between 1961 and 1974, another 1.5 million migrated.

they could inside their country. Those who had the resources and energy to do so crossed the border into India.

Based on the 1951 growth rate, the state of Assam should have a population of about 15 million. It has more than 7 million extra, according to the latest census.<sup>31</sup> The extra numbers can be accounted for by either immigrants or their descendants. Provisional data for the 1991 census puts the overall population of Assam at 22.29 million and the growth rate at 2.23 percent per year, a sharp drop from the 1971 figure of around 3.4 percent. The change in growth patterns indicates, first, a fall in migration from Bangladesh after the beginning of an anti-alien movement in Assam in 1979, and, second, a swing in out-migration from Bangladesh to West Bengal instead of Assam in the 1960s. Bengali speakers dominate in West Bengal, making movement into the area easier for migrants.

#### Migrants to Indian Urban Areas

Though Bangladesh persists in its strong proclamations that it has no illegal aliens in India, Bangladeshi communities have sprung up in New Delhi and Bombay under the shelter of flyovers and in Muslim-dominated neighborhoods. There are Bangladeshi beggars on the streets of the Indian capital. Politicians from the Congress Party and the right-wing, nationalist Bharatiya Janata Party have encouraged these Bangladeshi settlers, developing them as potential vote banks. The settlers benefit from a complex network of advantages, including development aid, education programs, and patronage, often at the cost of the original inhabitants. "There is no political will to deal with the situation," says one security official.

While the Government of India declares that there are about 100,000 Bangladeshi migrants in Delhi, intelligence estimates say the figure is actually closer to 200,000. The Economic Times describes a slum neighborhood in East Delhi, populated by three thousand Bangladeshi migrant families. Abdul Kader and his fellow residents are on the voters' list, have plots of land and ration cards; and the government has even declared that he, and tens of thousands of other low-income workers, do not need to pay banks back for small loans they have taken. At first, Kader claims that he and his family of fourteen are refugees of the 1971 Bangladesh War, but he later admits that he first migrated from West Pakistan where he was stranded during the 1971 war, to Bangladesh. He returned to Bangladesh because his family was there. "In Pakistan," he says, "we used to work in factories, mills; there were more jobs, the pay was higher. In Bangladesh we were penniless labor, paid a pittance. Two meals a day was difficult." Kader and others paid local agents who smuggled them from Bangladesh into India. Those in Delhi, in a manner of speaking, are well-settled. Kader says he and his two brothers together earn an average of 50 to 70 rupees per day (about \$2.50 to \$3.50) from plying cycle rickshaws. This is a total of nearly \$334 dollars each per year, which is double the average Bangladeshi income. "Our children are

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taught in a local school. Then they help out by picking rags. Overall our earnings are adequate, much better than we have ever had."

Sheikh Barah is a tailor who lives in a one-room shack in New Delhi, near the luxury Oberoi Hotel. He came to Delhi in 1971, has never sought citizenship, but has voted twice in general elections. "We used to live in Dhaka," says Barah. "It was very difficult to make ends meet; I had just got married." So, one day, he and his wife packed their belongings and traveled by bus, train and on foot to the border near Calcutta. After slipping across, they boarded a train to Delhi where they have lived since. "We have not been back and have no plans to go back to Bangladesh," Barah says. "There is nothing for us there. Here we manage quite well: we have our own home, of course it's small; our children are educated free at the local government school and my wife helps me with my work."

#### Government Failure

Out-migration from Bangladesh over the years has had a severe impact on the ethnic, linguistic, religious, economic and ecological fabric of northeast India and West Bengal, regions that share a common frontier with Bangladesh.

The prevailing view in the Government of Bangladesh supports the concept of an International Demographic Order, with migrants free to move where they find work, unhindered by international laws or boundaries. But India views the migrants as a potential security risk, whatever their reasons for migrating. Intelligence reports indicate that illegal migrants are pliable and easy to use in smuggling, in trans-border gangs, and in information-gathering for extremist groups both on the Indo-Bangladesh border and on the frontier with Pakistan.

The Border Security Force that patrols the Indian side of the international frontier says that it detained more than 56,000 Bangladeshis trying to cross into West Bengal in 1990. 32 Detentions and deportations of people held at the border in Assam and Tripura were far less, estimated at several hundred. "The rule of thumb in this game is that for every illegal immigrant caught, at least four get through, especially if they're Hindu," says one senior Indian diplomat, who knows the problem well. He states that the issue is raised at virtually every Indo-Bangladesh meeting of officials, diplomats and politicians. "But illegal migration remains the unfinished agenda of every dialogue, the unresolved issue. It's really a dialogue of the deaf: we tell Dhaka these people are coming in, Dhaka says they're not Bangladeshis, they're Indian smugglers or citizens returning after illegally visiting relatives or friends in Bangladesh."

Moves to deport aliens have been largely unsuccessful because of inadequate legislation, poor policing, political patronage, and economic compulsions. The Assam Government's Home Department said in 1991 that while 276,283 complaints against illegal immigrants were filed between

Out-migration from Bangladesh over the years has had a severe impact on the ethnic, linguistic, religious, economic and ecological fabric of northeast India and West Bengal. 1985 and 1990, only 6,456 were eventually identified as foreigners. Of this figure, 521 were deported.

According to T.V. Rajeshwar, a former Governor of West Bengal and a former Chief of the Intelligence Bureau, not more than 20 percent of the total illegal flow has been checked. He says he knows in detail of Bangladeshis coming across the border into West Bengal during the harvesting and sowing seasons, of rickshaw pullers visiting towns to work regularly, and students walking across to study in Indian schools. He adds that according to the state government, about 2.8 million Bangladeshi nationals entered West Bengal between 1972 and 1988. If one migrant is held for every five who get through, then illegal visitors to West Bengal over this sixteen year period numbered over 10 million.

The Bengal figures are underplayed by politicians for their own convenience. Their parties (the Congress Party and the leftist coalition led by the Communist Party of India) have been in power since 1971, and they gain from migrants' votes. The political reality of the flight from Bangladesh is that it brings vote banks for cynical politicians of all hues and ideologies.

#### **Ethnic Conflict in Assam**

#### Historical Background

India's state of Assam is a melting pot of tribes, languages and traditions. It produces a major share of India's tea, oil, jute and plywood. But Assam is industrially backward with little overall foreign investment or direct investment from other parts of India because of its great distance from major ports and expensive freight charges. The major investments have been in tea in the private sector and in oil and jute in the public sector, which have not benefitted Assam so much as the tea companies in Calcutta and India's foreign-oil import bill. Gasoline prices in Assam are higher than in New Delhi, and there are only two small refineries in the state, leading to complaints of exploitation by New Delhi. For the most part, Assam has been led by democratically elected governments, chosen by adult franchise. But between 1979 and 1985, a student-led agitation against illegal aliens from Bangladesh paralyzed the administration and the economy of Assam. The students agreed to stop their agitation after the central government gave assurances that post-1971 illegals would be deported and those who came in the 1960s would be disenfranchised for ten years. New Delhi also agreed to a large economic package that included new industrial investments as well as establishing technical institutes. The students formed their own party and came to power in elections in December 1985.

In the earlier part of this century, many migrants settled on the fertile riverbanks of Assam, creating distinctive areas where they lived a separate existence. These immigrants were first brought there by the British rulers to work on the railroads. Then, under a Muslim League Government in the

Between 1979 and 1985, a student-led agitation against illegal aliens from Bangladesh paralyzed the administration and the economy of Assam. 1930s, more were encouraged to come as part of a campaign to convince Britain that, when independence arrived, the province of Assam should be appended to Pakistan. That campaign failed.

The 1947 partition of the subcontinent sent millions of Hindu refugees from East Pakistan into Assam, West Bengal, Tripura, and into all parts of northern India. Later, international pacts between India and Pakistan conferred citizenship on those people who had left their properties, businesses and homes and migrated to either country before January 1, 1951. After that cutoff date, however, any person who entered India without a valid travel document was to be regarded as an illegal settler or visitor.

Migrants, however, were generally accepted by the Assamese so long as they were only laborers and peasants. Social tensions began to surface when they acquired more land and began to prosper. They were then seen as a physical, religious and cultural threat to the lifestyles of the Assamese. The migrants developed into a formidable force, holding the balance between victory and defeat in dozens of constituencies.

The price for the decades of influx was paid by innocent people, most brutally in 1983 when an estimated 4,000-5,000 persons died in a series of bloody incidents. Events that year brought Indian and world attention to the magnitude of the problem. One of the most brutal massacres in independent India took place at a little-known village called Nellie in Assam's Nowgong district. These killings were widely viewed as the result of the strategy followed first by the Muslim League government in Assam before independence and then by the Congress Party, to encourage immigration from East Bengal, later East Pakistan and Bangladesh. This strategy, which identified the migrants as solid vote bases, encouraged immigration, settlement and listing of the migrants on voters lists and ration cards. The result was the sharp alienation of local indigenous groups which nursed their resentments until an opportunity presented itself in a student-led boycott of statewide elections to avenge their long-held grievances.

#### Demographic Change

The anti-alien agitation that began in 1979 underlined the fact that the Assamese, particularly the middle and upper caste Hindus, were as concerned about the potential loss of political power as they were about their ethnic and cultural identity. An Assamese legislator remarked at the time: "An offshoot of this population explosion has been a sudden change in the composition of the district's electorate. The immigrants are in an absolute majority in seven of the nineteen Assembly constituencies . . . . In five more constituencies they are numerous enough to be crucial for an electorate victory."

The trouble began when, in preparation for an election to Parliament, ballot officials reported 600,000 names in one constituency. Students and other Assamese filed objections to 70,000 names, alleging these were Bangladeshis with no right to vote. The All Assam Students Union (AASU), one

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of the most influential organizations in the state, launched a movement calling for the deportation of millions of alleged "foreigners." AASU leaders placed the number of such foreigners or "Bangladeshis" at four million and said that they would swamp the predominantly Hindu-Assamese culture and disrupt the fabric of society, a composite of different ethnic strands ranging from Mongolian to Aryan.

Strike after strike paralyzed the administration and government. A series of state governments rose and fell, and this political instability forced New Delhi's intervention and direct rule. Between 1980 and 1983, the agitation focussed on ways to draw national attention to Assam's plight. The movement brought men, women and school children onto the roads to defy government curfews and crackdowns. The agitators' means were largely peaceful in the manner of Mahatma Gandhi; they volunteered arrest in the thousands. The atmosphere was enthusiastic and large numbers of middle and junior government employees in the state administration supported the strikes and other protests.

But there was always an undercurrent of violence. The confrontation worsened with agitators picketing oil installations and refineries and blocking the transport of oil-tanker trucks out of Assam. Police and paramilitary forces cleared the blockades several times. In the meantime, the Prime Minister, Indira Gandhi, opened negotiations with the students. They would not budge, accusing political parties of encouraging immigration and thereby causing the current crisis in the state. "We demand our constitutional rights and that foreigners be deported and detected to save Assam and the Assamese," said Prafulla Mahanta, then president of the student union which spearheaded the campaign, and later, Assam's controversial Chief Minister.

The violence stuttered on and the state administration feebly responded. Mrs. Gandhi demanded that the students call off their agitation, pledging that the Government would detect and deport aliens who had come since 1971. They should get back to their classes, she said. Angered by their defiance, she decided to force the issue through a poll. She could not have made a worse mistake.

It resulted in the worst ethnic rioting in India since independence and the toll in those violent days has not been surpassed yet by any civil strife in the country, including the anti-Sikh pogroms of 1984 in Dehli, the anti-Muslim riots of Bombay in January 1993 or religious rioting in 1990 and 1992 over a disputed shrine at Ayodhya, Northern India.

The students called for a boycott and for agitators to resist the balloting. When the vote was held, in some places there were only one or two candidates. In other places, there were only a dozen voters. New Delhi had to fly in balloting officials and transport them with armed guards to polling centers. Many balloting centers were deserted, with frightened junior officials from Delhi manning their posts, doodling on paper with nothing to do, no voters to guide, no ballot papers to arrange, and surrounded by hostile but quiet crowds of villagers.

Strike after strike paralyzed the administration and government [of Assam]. A series of state governments rose and fell, and this political instability forced New Delhi's intervention and direct rule.

The whole exercise was a farce. There was heavy polling in a few districts dominated by Bengali-speaking Hindus and Muslims, and also in tea-garden labor strongholds, which were traditional bastions of the Congress Party and made up its vote banks. Congress won an easy majority but the cost was frightening, since the exercise seriously damaged Mrs. Gandhi's political integrity and popularity in the east of the country.

#### Massacre in Nellie

The 1983 elections renewed old rivalries. The sectarian and ethnic tension added to the bitterness of tribal groups over land-grabs by immigrants, and the scent of violence in the Assamese resistance movement, created an explosive brew.

In the flat fields of a sleepy village called Nellie, more than 8,000 villagers, predominantly members of the Lalung tribe, surrounded Bengali Muslim immigrants and systematically set about butchering them. The killing began at about eight o'clock on a February morning and went on for nearly five hours before paramilitary troops heard of the incident from a survivor and rushed to the site. They were misled, they said, by local police, who were accused of complicity in the crime.

Nellie and other villages that were the targets of attack are located well off the main road, a good hour's walk through fields and across canals. Local officials had warned senior administrators in the state capital about possible trouble in this very area and the need for urgent reinforcements. The forces never came. The following morning, the dried rice fields of Nellie resembled a bloody battlefield. Bodies were scattered across acre after acre, but none of the attackers had died. The only victims were Muslim immigrants. The toll was more than 1,700 from the five hour rampage. Entire families were wiped out; members of several families were lined up next to each other, from grandfathers to infants not more than a few months old.

A study of the reasons behind the riots underlines a common factor between Bangladesh and northeast India: land. Many of the Lalung tribespeople complained of the way they had been "duped" out of their land by successive waves of migrants, many of whom had lived in the area for generations. The migrants bought the rich, fertile paddyfields from the tribals, getting them to sign documents they did not understand, getting around British-made laws which disallowed the purchase of tribal land by non-tribals. "We have pattas (land deeds) to show we have the rights to this place, we did not deserve to die like this," said a young Muslim man named Motalib Khan. He and others proclaimed they had been born in Assam along with their fathers and broods of cousins. "We know the attackers," said Motalib, as he surveyed the carnage. "These were people we had grown up with, played together, studied together, talked together, how can they hate us so?" asked Motalib. It was a question that none of his fellow villagers could answer, but the fear and trauma behind that question remains. As Motalib asked, "We are Indians, not Bangladeshis, we were born here, where can we

A study of the reasons behind the riots underlines a common factor between Bangladesh and northeast India: land. go?" The attackers fled to the nearby hills. Only a few were caught, and the cases against them were never followed up.

Assamese villagers say new migrants from Bangladesh have been coming stealthily to the area, drawn by their relatives and the possibility of a life of dignity. There were other conflicts elsewhere in the valley during the 1983 election between Assamese Hindus and tribespeople; between Assamese Hindus and Bengali Hindus; and more attacks by Assamese and native tribespeople on Muslim immigrants. In total, some 5,000 people died. In each case, the key issue was land.

#### **Ethnic Conflict in Tripura and Bangladesh**

Tripura is the only state in India, barring Sikkim, where the original inhabitants have become a minority in their own land. Tripura is a small thumb of land that juts into Bangladesh from Assam's southeast. An area of about 4,116 square miles, it has a semi-tropical climate and is flanked on three sides by Bangladesh with a land border of more than 480 miles.

Unlike Assam and West Bengal, Tripura has been swamped by Hindu refugees who have been coming since the 1950s. The state is a small area that was dominated by nineteen tribes with the characteristics of Southeast Asians. They are Buddhists and Christians, yet the state's population has been converted to a Bengali majority in a few decades. One estimate says that 600 persons fled to Tripura every day after Hindus were attacked in East Pakistan in 1961. In 1947, 93 percent of Tripura's population of about 600,000 were tribespeople. By 1981, they were reduced to a minority of 28.5 percent of a population of 2.06 million, and they had lost political power.<sup>33</sup> A bitter insurgency began in 1980 and continued, with hundreds of Bengalis being killed, until leaders of the movement signed a peace pact with Delhi in 1988. The leader of the insurgency, Bijoy Hrangkhawl, said that he was driven to revolt because he believed that the Bengalis would swamp his people. As part of the accord, the government agreed to rehabilitate the insurgency's fighters, restore old lands to dispossessed Tripuris, and check the illegal influx. But Hrangkhawl says that aliens are still crossing into his state, and he has warned New Delhi that failure to curb this could trigger fresh trouble. Indeed, a small insurgent operation, independent of Hrankhawl, has been attacking officials since mid-1991.

Within Bangladesh, in the Chittagong Hill Tracts, south of Tripura, another ethnic conflict rages. The Bangladesh Government has pressed a settlement policy, encouraging Muslim, Bengali-speaking migrants to move to a thinly-populated but thickly-forested region where Buddhist and Christian tribal groups have lived for centuries. The ensuing clashes have been converted into an insurgency that is still continuing, taking a toll on settlers, the original tribal inhabitants, and the Bangladesh military forces. The insurgency is being actively supported by New Delhi, which sees it as an opportunity to control its impoverished neighbor.

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By the year 2020, there will be 220 million Bangladeshis and one billion Indians competing for land and jobs. Without policies on population, migration, and flood and river control in the next few years, we will see clashing nationalities and ethnic groups on the borders of India and Bangladesh, perhaps on a greater scale than in Yugoslavia, Armenia, and Azerbaijan.

#### Conclusion

Bangladesh, with its meager resources and swelling population, is simply not in control of its own destiny. The future of the country lies in a combined attack by Dhaka and its neighbors on the overpopulation and poverty that is sweeping the entire Gangetic-Brahmaputra basin. No nation in this region can operate in isolation.

The following proposals deserve further study:

First, a regional grouping that was set up in the mid-1950s to help cooperation among the countries of the area — Nepal, India, Pakistan, Sri Lanka, Bangladesh, Bhutan and the Maldives — must muster the political will to ensure that policies are actually pursued. At the moment, cooperation is taking place at a very peripheral level and is limited to resolutions. A problem with the South Asian Association for Regional Cooperation (SAARC) is that mutual suspicions among its members have virtually frozen relations between countries like Pakistan and India. India is regarded as the big power of the area which is constantly hectoring the others and trying to get them to fall in line. This suspicion is not entirely true although New Delhi does try to pressure the other countries on issues that it regards as important. Without political will, none of the other proposals suggested below can work.

Second, governments must take administrative and security measures to stem the illegal flow of migrants. Countries that find it difficult to secure jobs for their own people will not be well-disposed toward other nationalities seeking those very jobs. It has been suggested that India and Bangladesh create a 150-meter "security belt" on either side of the international frontier that would enable better policing. But Bangladesh has rejected this suggestion, given the country's acute pressures on land and the political implications of such a step. India is in a better position to implement the plan by shifting communities along the border to other areas and by compensating them adequately.

Third, soil conservation, better agricultural and irrigation planning, and upstream reforestation can all be used to reduce flooding. These steps will help slow the Brahmaputra and its tributaries in their headlong dash for the plains. Fourth, water catchment areas in the lower and medium Himalayas should be organized on a massive scale to control run-off before the monsoon rains sweep down into the Gangetic and Brahmaputra valleys. Reforestation goes hand-in-hand with such a scheme. An obvious target for development is Nepal, one of the world's best examples of a devastated forest system, ruined by unscientific and reckless felling that has greatly reduced forest

Soil conservation, better agricultural and irrigation planning, and upstream reforestation can all be used to reduce flooding.

cover in the past decades. Fifth, according to a 1986 CSE report, there are many places in the hill regions of India where small hydroelectric power generators ranging from "a few kilowatts to several megawatts" could energize rural communities. Citing the example of China, which has more than 88,000 small hydro-power stations, the CSE report advocates small units capable of being built, maintained and operated by rural communities. Sixth and much more ambitiously, the founder of the Mitsubishi Research Institute of Japan, Masaki Nakajima, proposes a \$500 billion plan to stimulate the world economy with a series of international projects financed through a Global Infrastructure Fund. A preliminary study proposes eleven large dams around the Brahmaputra loop where the Tsang-po, as the river is known in Tibet, roars through the Himalayan hills into the Assam valley. These power stations would generate 70,000 megawatts.

Seventh, Indian river experts say that giant, multipurpose dams on major rivers in Arunachal Pradesh, near Tibet, can store at least six million hectare-meters of water. They say this will reduce the level of floods in Assam and in Bangladesh. The dams there and on the Barak in Cachar would also protect the Cachar Plain and benefit the Meghna basin and Sylhet in Bangladesh. Eighth, the reduction of the flood flow of the Brahmaputra by even a few feet would make all the difference for major displacement and property destruction in Assam and in locations further downstream. Verghese says that this could positively affect as much as one-third of the normally flood-prone areas of Bangladesh, release new areas for cultivation and settlement during the wet seasons, and create opportunities for irrigation in the dry season. Good logging techniques, sound soil conservation and cropping practices, as well as careful watershed management, could all contribute to flood control. The improvement of water conservation in the catchment areas will reduce, not stop, the fierce flooding downstream. But it will raise water tables for drinking and agriculture and contribute to sustainable and productive land use.

But arguments in favor of the efficacy of large dams are countered by advocates of sustainable development. These groups say that India and other low-income nations cannot afford such mega-projects which may not be able to stand up to the high degree of seismicity and also face the problem of silting. They say that the benefits of such a scheme will reach largely urban populations and industrial belts, benefitting middle class groups, and not rural populations. Cities and industry are among the largest consumers of power.

Those opposed to the construction of the Narmada Dam in central and western India, India's most controversial development project, say that these and other factors, regarding the rights of the displaced, are not taken into consideration when such projects are conceived. The leaders of the anti-Narmada project say that local villagers and communities should be consulted on such issues and that decisions about their lives should not be taken at state or national capitals. They also say that smaller dams, with lower outlays, and the harnessing of alternative energy sources, such as solar and

The reduction of the flood flow of the Brahmaputra by even a few feet would make all the difference for major displacement and property destruction in Assam and in locations further downstream. wind power, are the right path for development for a nation of India's size with its financial restraints and pressure on natural resources.

Despite the obstacles, there is no choice but to cooperate, to pool resources and expertise, and to work for a marriage of great dams, small projects and local conservation. This will help the populations of these regions avoid bitter conflicts arising from the destruction of the commons, increased scarcity of cropland, and diminishing jobs.

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