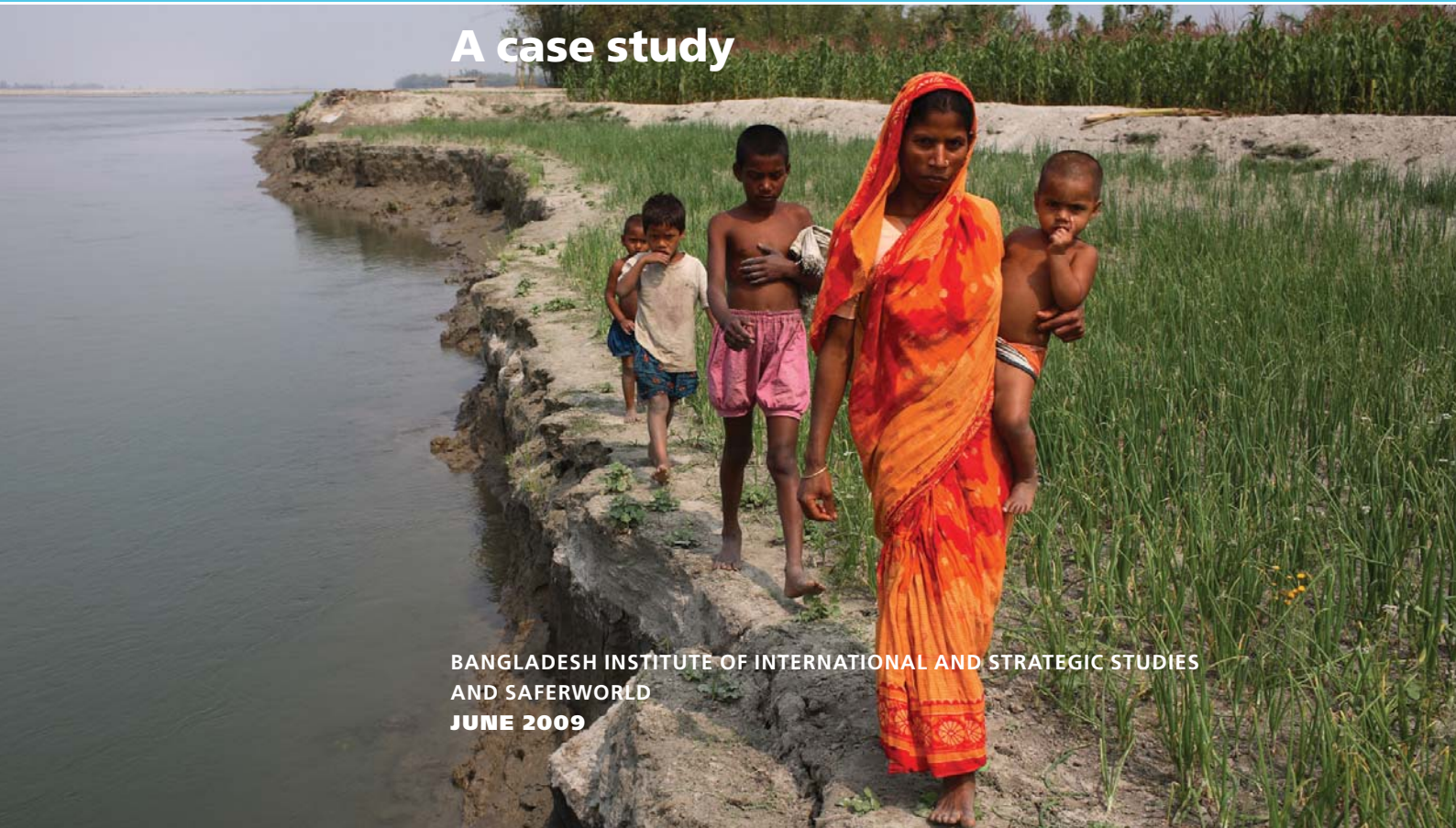


# Climate change and security in Bangladesh

**A case study**



BANGLADESH INSTITUTE OF INTERNATIONAL AND STRATEGIC STUDIES  
AND SAFERWORLD  
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Executive summary of *Climate change and security in Bangladesh: A case study*, full report available in English at [www.saferworld.org.uk/pub\\_search.php](http://www.saferworld.org.uk/pub_search.php)

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## Profiles of organisations



Bangladesh Institute of International and Strategic Studies (BISS) is a statutory and autonomous institute for collaborative research, networking and interaction on strategic and international issues pertaining to Bangladesh and South Asia.



Saferworld is an independent non-governmental organisation that works to prevent and reduce violent conflict and promote co-operative approaches to security. We work with governments, international organisations and civil society to encourage and support effective policies and practices through advocacy, research and policy development and through supporting the actions of others.

**THIS CASE STUDY** explores the potential impact of climate change on security and conflict in Bangladesh. As international researchers have started to make the link between climate change, insecurity and conflict, they have raised concerns that Bangladesh's extreme vulnerability to the environmental effects of climate change may create conditions that put it at risk of greater insecurity and possible conflict. It is therefore important to analyse this issue in detail, in order to identify how serious the risk is and what can be done to address it.

A study of human security in Bangladesh by Saferworld undertaken in 2007 identified numerous issues relating to both 'freedom from want' aspects of human security (e.g. economic security, food security, health security and environmental security) and 'freedom from fear' aspects (e.g. personal security, political security and tenure security). This report considers how these factors may be affected by climate change. The authors hope that it will contribute to the development of appropriate policies to address climate change-related insecurity. It is based on field work in two groups of locations: places that are particularly vulnerable to climate change ('source areas'); and places that are destination areas for migrants who are leaving these source areas. This field work has been combined with an extensive desk review of available information on climate change and security issues in Bangladesh.

The relationship between climate change and security is not necessarily direct, but depends on a chain of consequences. For example, climate change causes environmental degradation. In areas where this phenomenon occurs, it undermines livelihoods, reducing basic human security and creating increased tension as competition for dwindling resources becomes more intense. This tension can lead to crime and violence, increasing social instability. The deteriorating economic and social situation also drives people to migrate from these areas to towns and cities in search of a better life. However, this migration away from affected areas can have negative effects on the economic and social situation in destination areas, which may again lead to increased tension, crime and violence and the risk of serious social disturbances – leading in the worst-case scenario to violent conflict.

The field research found that in the source areas, there was a strong belief that climate change was already occurring, manifested in rising temperatures, increased river and coastal flooding and erosion, rising sea levels, increasing salinity, and more frequent, more intense severe weather events. These naturally occurring hazards appear to be having a number of negative effects on the economic livelihoods, health and food security of the local population:

- **Loss of property and material goods.** An increasing number of people are suffering damage or loss to their property. Houses have been swept away or destroyed by floods or erosion. Villagers have lost their cattle in river flooding. Seeds have been swept away by floods. Flooding and rising sea levels have also damaged roads and other essential infrastructure, further limiting economic opportunities.
- **Loss and degradation of agricultural land.** Land is being lost due to rising sea levels and erosion, and climate change models predict that in the next decades huge amounts of further land could be lost in this way. Other land is becoming unproductive due to temperature rises and increased salinity. This is causing agricultural output to fall, as a result of which food insecurity is growing.
- **Increased unemployment.** The loss and degradation of land is leaving many people without means of supporting themselves economically, and unemployment is rising. Unemployment is also fuelled by the growth of shrimp farming, since shrimp farms employ many fewer people than the agriculture they have replaced.
- **Reduction in the availability of water.** Some water sources have been contaminated due to increased salinisation. The need to find water places a particular strain on women, since they are usually responsible for providing the family with water and food.
- **Increase in the prevalence of diseases.** The decline in the availability of fresh water is leading to increased disease as people drink contaminated water. Flood water is also attracting mosquitoes that carry malaria and dengue fever. More frequent flooding also makes it harder to get access to health care.
- **Reduced availability of firewood.** Floods wash away firewood, a crucial resource for cooking.

In turn, these problems are driving increased tension, crime and violence as livelihoods break down and competition for resources intensifies:

- **Tension over land.** There is increased competition for access to, and control of, land to use for farming. In particular, incidences were reported of clashes between agricultural farmers and shrimp farm workers fuelled by resentment over the impact that shrimp farming had had on agricultural livelihoods.
- **Tension over property.** Increases in property theft are often reported following naturally occurring hazards such as floods – cattle, household goods and farming equipment are stolen.
- **Tension over water resources.** Where water in one area has been contaminated, inhabitants are forced to rely on other water sources, which can lead to tension and even violence as different groups compete for access to water.

- **Increased female insecurity and sexual violence.** Women suffer particularly from losses caused by naturally occurring hazards since it is harder for them to gain access to credit and to secure their livelihoods. It is also perceived that the growth of shrimp farming is leading to an influx of workers from outside the area, and that this may be related to an upsurge in sexual violence. Whether this is true or not, such suspicions can lead to a sharp increase in tension between settled communities and the incoming shrimp farmers.

Bangladeshis are used to dealing with naturally occurring hazards and have developed numerous coping strategies. However, their increasing frequency and intensity is now threatening to overwhelm these coping mechanisms, causing more people to migrate away from their homes, either temporarily or permanently.

Field research in destination areas provided evidence that an influx of migrants was leading to greater competition for resources. There were three main triggers of conflict:

- **Disputes over land.** High levels of physical insecurity and conflict were reported in destination areas as a result of competition for land. There is particularly fierce competition for government-owned *khas* land, which has led to violence in some cases. In one area, local gangs were restricting access to land and demanding money for rent. There have also been clashes in response to attempts by vested interests and landowners to grab land and/or forcibly evict migrants.
- **Competition for employment.** Migrants add to the labour pool, increasing competition for jobs. Migrants face a double insecurity: not only is it hard for them to find employment, but they also face reprisals from existing residents who blame them for unemployment and falling wages. This has led to migrants being harassed and attacked by local people.
- **Competition for access to water.** As in source areas, there is increasing competition for water. This leads to clashes between groups and forces many people to travel long distances to find water.

Most migrants end up in urban slums, particularly in Dhaka, and there is some evidence that this constant influx of people is contributing to rising crime and insecurity in these areas.

No primary field research was carried out on the possible links between climate change and regional migration. Nonetheless, the paper notes concerns that climate change will force ever greater numbers of Bangladeshis to migrate out of the country, mostly illegally. The most common destination will be India, and such migration could become a very sensitive issue in diplomatic relations between the two countries and has the potential to contribute to regional instability.

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## Recommendations

There is significant evidence to suggest that environmental degradation is already fuelling insecurity, and in particular, is related to a growth in internal migration. Climate change is predicted to have an overall negative impact on long-term security and conflict factors, acting as a threat multiplier that increases the volatility of existing causes of conflict and may generate new insecurities. The following steps are recommended (more detailed recommendations are provided in the full report):

- **Promote a cross-governmental approach to climate change and security.** Climate change policy and security policy share strong mutual interests and should be co-ordinated effectively. This might involve the establishment of climate security working groups bringing together different government departments and tiers with international institutions, climate scientists, conflict prevention/peacebuilding experts and local civil society organisations. Donor programming on migration, land, environment, climate change and security also needs to be joined up more effectively. Policies and funding streams relating both to climate change and to conflict and security must fully acknowledge the linkages between climate change and insecurity and approach the resourcing of relevant programmes in a flexible manner.
- **Ensure that all climate change adaptation and development programming is conflict-sensitive.** A peace and conflict impact assessment of existing and future climate change programmes should be carried out in order to identify strategies which will reduce insecurity and the risk of conflict most effectively. Conflict-sensitive approaches and related research should be built into the Bangladesh Climate Change Strategy and Action Plan.
- **Integrate analysis of the predicted impact of climate change into all future conflict analyses.** All future peace and conflict impact assessments relating to programming in Bangladesh should include the potential impact of climate change as a factor impacting on conflict dynamics – not only when looking at climate change policy, but for all programmes.
- **Strengthen the capacity of local government.** Many environmental security issues are local in nature and local government must play a leading role in addressing (or adapting) to these challenges in a conflict-sensitive manner.
- **Begin a debate on the balance between mitigation and adaptation policies.** There is a fundamental question underlying climate change policy which must be addressed immediately. Internationally, the overwhelming emphasis until recently has been on taking steps designed to prevent or reduce climate change, while relatively little attention has been paid to adaptation mechanisms. However, if it is not possible completely to mitigate climate change, more attention and resources will need to be spent on adaptation – including adapting to the insecurity caused by climate change. National and international debate is urgently required on how to strike a balance (in terms of funding and priority of implementation) between

policies that seek to prevent climate change, those that seek to adapt to its immediate environmental consequences, and those that seek to adapt to the impact of environmental degradation on social and political stability.

- **Allow local communities to spend adaptation resources on conflict prevention and security-building if required.** Local communities should be able to spend resources allocated to ‘adaptation’ on community security measures if they believe it to be necessary (for example if competition for resources is leading to conflicts that could be resolved through dispute resolution mechanisms).
- **Strengthen capacity to manage internal migration.** Given the predicted scale of migration and the impact that this could have on conflict and security issues, it is clear that major efforts are required to strengthen the state’s capacity to manage internal migration.
- **Conduct more detailed policy research.** This paper has identified some worrying trends, but more research is required in order to understand them in more detail and develop appropriate responses. Some priorities for research include:
  - mapping of the areas most likely to experience insecurity as a result of environmental change, in order to assess the scale of the risk and plan appropriate responses
  - analysis of existing community security and conflict prevention mechanisms in these vulnerable areas
  - thorough analysis of the extent to which climate change impacts are fuelling migration from affected areas, in order to predict how severely climate change will fuel such migration in future
  - precise mapping of the likely movement of migrants within Bangladesh and to neighbouring countries, and
  - review of current formal and informal strategies for managing internal and cross-border migration and their capacity to cope with climate change-related migration.
- **Adopt a regional approach to combating climate change and managing migration.** Further research is required into how climate change will affect regional security and conflict dynamics, and how prepared national, bilateral, regional and global security mechanisms are to cope with any threats that occur – particularly greater cross-border migration.

**Climate change is predicted to have an overall negative impact on long-term security and conflict dynamics, acting as a threat multiplier that increases the volatility of existing causes of conflict and may generate new insecurities. There is significant evidence to suggest that the environmental degradation caused by climate change is already fuelling insecurity, in particular related to a growth in internal migration.**

**This executive summary of a case study in Bangladesh provides an insight into the potential impact of climate change on security and conflict dynamics. The case study forms part of a series of papers exploring the relationship between violent conflict, insecurity and climate change that seek to generate further debate and action on this important topic.**

**COVER PHOTO:** A family walks along the edge of a river island. Life is hazardous and uncertain as flooding and erosion are common.

GMB AKASH/PANOS.

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