Theme: 'Giving the people what they want'

Covering the environmental issues and global warming in Delta land: A study of three newspapers

ABSTRACT

This article explores the coverage of environmental issues in the daily newspapers of Bangladesh, a South-Asian country facing the onslaught of global warming because of its low-lying deltaic plains and overpopulation. The results are based on an examination of the content of environmental coverage in three national daily newspapers (two Bangla and one Englishlanguage) during June 2007. Drawing on field theory and analytical frames from journalism studies, this study examines the principles of journalistic practices as revealed by the content of these publications. The findings indicate that environmental journalism is a strong subfield in Bangladesh's media, which constructs its own veracity in ways that reflect the social, economic and political contexts of each publication. Based on this small study, the authors conclude that environmental journalists in Bangladesh adopt approaches to sourcing and causation which enable them, in alliance with non-government organisations, to pursue their aim of actively intervening in the field of government policy of Bangladesh, both in international and local spheres.

Keywords: Bangladesh, development, environmental journalism, field theory, global warming, journalists' sources

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S A specific issue of public and political concern, the environment started to attract the attention of Western news workers in the late 1960s and by the 1980s, had settled into an area worthy of at least

spasmodic media attention. Over recent decades, by negotiating access and shaping meanings, the media has played a key role in environmental politics (Lester & Hutchins, 2009). Since 2002, the environment has crept up the news agenda, becoming a 'round' of major concern that overlaps with those of politics and economics.

Predictably, the attention of media scholars has also focused on how the media cover the environment and sustainability. However, most research into environmental journalism (Hansen, 1993; Shanahan & McComas, 1997; Spellerberg, Buchan & Early, 2006; Musukuma, 2002; Hutchins & Lester, 2006; Lester and Hutchins, 2009) has focused on industrially-advanced countries. Interesting differences have been noted in the reporting of environmental issues between different Western countries. For example, a cross-cultural comparison of global warming coverage in France and the United States found that France's coverage was more event-based, focused more on international relations and offered a more restricted range of perspectives than the United States coverage, which tended to place more emphasis on the conflict between scientists and politicians (Brossard et al., 2004).

This Western focus leaves many areas of the world out of the scholarly gaze, creating a gap in our understanding about how the international media covers the environment, including the critical issue of global warming. While reflecting patterns in journalism studies more generally, this gap is of considerable concern given the global nature of sustainability problems (see also Josephi, 2005) and the critical role of communication in environmental politics.

It was with the aim of contributing to filling this gap that in 2005, Bacon (one of the authors of this article) and Nash analysed environmental stories in five South-East Asian English-language newspapers (Vietnam News, South China Morning Post, Jakarta Post, Bangkok Post, New Straits Times) and compared them with the coverage in the Sydney broadsheet newspaper, the Sydney Morning Herald (Bacon & Nash, 2006, pp.115-125). With the exception of one article in the Sydney Morning Herald challenging the seriousness of global warming as an issue, all publications and stories were underpinned by the assumption that the environment needed protection. However, marked differences did exist. The Jakarta Post for instance, had the most environmental stories over April and May in 2005 and used far more nongovernment organisational (NGO) sources and fewer government sources than publications elsewhere. One of the largest of the newspapers, the *Manila Bulletin* had little environmental coverage, provided no coverage of forests (an issue in the Philippines) and gave proportionally more space to stage-managed events than any other outlet. It was not suggested that this finding reflected the overall quality of environmental journalism in the Philippines but rather that it was likely to be a reflection of the corporate ownership and pro-business and progovernment editorial agenda of this outlet.

This earlier study was constrained by the fact that its choice of newspapers was limited to those published in the English language. The research on which this article is based seeks to extend the understanding of Asian coverage of environmental issues by examining three newspapers in Bangladesh. The papers include two Bangla-language newspapers—the *Daily Ittefaq* (circ. 125,000) and the *Shamokal* (circ. 135,000); and one English-language publication—*The Daily Star* (circ. 35,500) (personal commmunication, 2008). These newspapers were chosen because they were expected to offer a range of perspectives on Bangladesh's journalism. This article reports on an analysis of environmental stories covered by these newspapers in June 2007.

Bangladesh—some background

As the largest delta in the world, Bangladesh is a low-lying South-Asian country with a total land area of 147,570 square kilometres. 'Topographically, the country is almost entirely a fertile alluvial plain formed by the two main rivers, the Ganges and the Brahmaputra...and their hundreds of tributaries. Bangladesh is often referred to as a land of rivers' (BBS, 2006, p. 2). The coastal area is situated just a few metres above sea level. With a population of approximately 155 million, Bangladesh is the most densely populated country in the world, apart from a couple of tiny city-states.

Journalism in a conventional contemporary sense began in Bangladesh during the British colonial period with the introduction of printing presses by independent entrepreneurs as well as colonial missionaries. According to Chaudhary and Chen (1995), the first two-sheet weekly, called the *Bengal Gazette*, started to publish from India in 1780 (Zaman, 2004; Chaudhary & Chen, 1995) and the first publication started within the geographic region now known as Bangladesh in the mid-19th century from the northern district of Rangpur. Later, the town of Dhaka, now the country's capital, became the centre of newspaper publication.

In contrast to the decline of newspapers in the United States and other Western countries, newspapers in Bangladesh are significantly increasing in circulation despite a literacy rate of only 56 percent. Newspapers sales in Bangladesh went up 8.3 percent in 2006 and 30 percent during the five-year period preceding 2006. This coincides with an Asia-wide surge in newspaper circulation; seven of the 10 current best-selling newspapers in the world are in Asia (World Press Trend, 2007; see also Merrill, 1990, 1995).

The three publications chosen for this study are broadsheet newspapers, based in the capital city of Dhaka, and privately owned by leading businesses. The *Daily Ittefaq* is a family-owned business; founded in early 1950s by a legendary newspaper editor Toffazzal Hossain Manik Mia. Manik Mia's two sons now own the paper (one of the sons is a former minister and the leader of a minor political party). *The Daily Star*, which carries the slogan *Your Right to Know* on its front page was established by another famous editor Syed Mohammed Ali (S. M. Ali) in the early 1990s, but is now part of a big media company that owns other publications and media businesses. The *Shamokal* is a recent initiative by a prominent business house with no prior media connection. In general, all three newspapers follow an editorial line which is in the middle ground of politics in Bangladesh, both supporting and criticising the government of the day.

Compared to the older, more traditional *Daily Ittefaq*, which is heavily reliant on government sources, the *Shamokal* is staffed by a new breed of younger journalists who emerged in the early 1990s and are more rigorous in terms of professional practices, significantly broadening their pool of sources by going beyond official or expert sources to activists, lay people and academic sources. The publication also uses less formal and more dynamic linguistic and presentation styles.

Despite the growth in the newspaper market, circulation of news publications in Bangladesh remains low. For instance, with a population of a mere 21 million, Australia still has considerably higher circulation of newspapers when individual publications are compared. The *Sydney Morning Herald*, one of two metropolitan dailies in Sydney, had a daily weekday circulation of 212,500 copies in 2008 (Australian Press Council, 2008), compared with the circulation figure of 135,020 for the *Shamokal*, or the paltry 35,577 for *The Daily Star*. However, the importance of newspapers and other news media in social and political affairs of the nation is no less important and active than in Western nations.

Little research exists in English about Bangladesh news content and how it might differ from that in other countries. In an article about news reporting on war, one of the authors of this article, Zaman (2004), argued that even though the professional practices of news organisations are broadly similar in Western and non-western countries, news content can be framed and reported in significantly different ways. Zaman's content analysis of news of the 2003 war in Iraq showed that even though the main sources of news were Western news agencies, Bangladesh's newspapers rejected the definition of that war produced in Western news content, reflecting the opposition to the war shared by most of the country's population. While the context for environmental news may be less starkly conflicting than in the case of war reporting, this research began in the expectation that environmental reporting in Bangladesh will reflect the particular influences of the historic, cultural and socio-political context of that country.

Environmental issues in Bangladesh

Since 2000, there have been grim warnings about the likely impact on Bangladesh of global warming. In the months preceding June 2007, the Intergovernmental Panel on Climate Change predicted that Bangladesh would be one of the most severely threatened countries, with rising sea levels predicted to devour 17 percent of Bangladesh by 2050, displacing 20 million people (IPCC, 2007). Depending on which index is used, Bangladesh ranks either at the top or near the top in risk from climate change (Germanwatch, 2009). By comparison, its contribution to global warming is insignificant. Bangladesh's per capita carbon dioxide emissions in 2004 were 0.25 tons, making it 175th on a per capita international ranking of 206 countries.

Bangladesh lacks energy for development and infrastructure to protect against the effects of climate change. Moreover, global warming is just one of the environmental problems that threaten the people of Bangladesh. The country's constrained resources are required to tackle over-development, river pollution, biodiversity depletion, deforestation, and drought and water shortages that will become more severe if planned up-river dams go ahead. Low-lying Bangladesh is also well known for its historic vulnerability to flooding.

The tendency of Western media to ignore developing countries until a major disaster or conflict strikes is well documented by media

studies researchers. For this reason, the image that mainstream Western media has projected of Bangladesh is one of poverty and floods (Bacon & Nash, 2004; Glasgow University Media Group, 2000; Philo, 2001). Yet, the environmental image of Bangladesh in the Western media is not always negative. In the aftermath of the United States' Hurricane Katrina disaster in New Orleans, it was reported widely that Bangladesh has developed knowledge and systems for dealing with such disasters (Theiren, 2005).

Conceptual approach

This research draws on media sociological approaches to the study of the interaction between journalists and their sources.

News production around environmental issues is 'the meaning attributed to events, processes or states of affairs' (Ericson et al., 1989 p. 113). It is through the practices of selecting and quoting sources that journalists construct 'narratives of truth', justify their claims through creating as 'web of facticity' (Tuchman, 1978) and create maps of meaning (Hall et al., 1978; Berkowitz, 2009). As discussed in Bacon and Nash (2006), empirical studies of sources' interactions have tended to support Stuart Hall's influential view that by over-accessing the views of powerful sources or 'authorised knowers' (as Ericson called them), journalists play a role in legitimising existing political and economic relations (Davis, 2000; Bacon & Nash, 2003). We agree with Schlesinger and others however, that Hall's view, which was developed in the context of a major study of the media's role in policy formation in Britain in the late 1970s, underestimates journalists' agency in reporting on contests both within elites and between source organisations. While at times amplifying powerful elites, in other contexts, the media plays a role in critiquing and exposing the practices of those who exercise economic, political or symbolic power (Schlesinger, 1990; Curran, 1996, p. 129; Cottle, 2003).

In understanding the role that media play, it is important to step back and adopt what Schlesinger (1990) called a less media-centric approach. In attempting this, we have found Bourdieu's relational field analysis approach, which focuses on the ways in which power relations within fields intersect with power relations in other fields, to be useful (Bourdieu & Waquant, 1992, pp. 94-115; Schlesinger 1990, p. 77). While Bourdieu focused more on fields of cultural production such as academia and the literary field, his work has been applied recently to the field of journalism and its subfields (Benson &

Neveu, 2005). An examination of the interaction between journalists and sources in particular moments in time and space is one way of investigating the intersection of the symbolic field of journalism with other fields, including those of politics, economics, science and other forms of cultural activity.

In the case of source-journalist relations, journalists and their institutional sources, such as experts, government and military officials, politicians, company sources and NGOs, interact with each other in pursuit of their interests. Both, although often not explicitly, recognise how they are going to play by the rules within the media field. These rules may, for example, include formal and informal understandings about how the media will respond to government endorsed annual events, how 'off the record' sources can access the media, how experts will be used to legitimise particular perspectives and how public relations practitioners and journalists will relate to each other. Through such practices, sources and journalists pursue their interests while maintaining their own sense of identity and 'professional' integrity. The advantage of Bourdieu's broad framework of fields is that it provides an inclusive framework, encompassing macro- and micro-organisational perspectives, which enables a specific understanding of particular instances of journalism practice as well as insight into how these differ both within and between particular national contexts.

Tracing the environmental concerns: Methodology

We conducted a basic content analysis of the environmental coverage in the three selected newspapers in Bangladesh to discern news reporting patterns in a systematic way (Hansen, 2009). We analysed selected stories for closer analysis to glimpse how social meaning emerged through the reporting practices of journalists. We recognise that to capture the complexity of interactions between the journalism field in Bangladesh with other fields, it would be necessary to conduct interviews with sources and journalists. However, this was not within the scope of this project and we put this forward as a snapshot which can provide insights that could lead to further research.

Electronic database key-term search was not applicable to the Bangla newspapers, so the selection of items was done by manual scanning of the websites of the *Daily Ittefaq*, the *Shamokal* and *The Daily Star* by one of the authors who possesses the required language skills. It is acknowledged that the examination of news coverage could have been more comprehensive if hard copies of these newspapers were obtained.

Following Nash and Bacon (2006), each story was coded according to topics (water, forest, pollution, waste, land), number of words, type of articles (news, feature, commentary etc.). Types of sources and attribution of sources were examined to comprehend how the notions of 'primary definers', 'competition among sources' and 'facticity' operated in these stories.

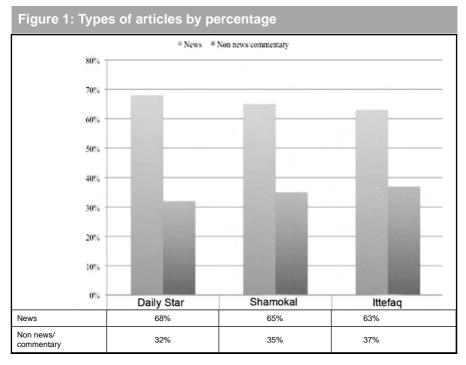
After conducting a basic quantitative analysis, we chose stories linked to dominant themes in the environmental coverage in June 2007 for closer analysis.

Environmental news in Bangladesh—June 2007

During June 2007, there were a substantial number of environmental stories in all three newspapers, including a number of front page stories. *The Daily Star* had the most stories with 104; the *Shamokal* had 78 and *The Daily Ittefaq*, 81. In the Bacon and Nash study over May and June 2005, the *Jakarta Post* had considerably more articles over two months than any of the other publication with 84 articles, four times as many as the *Manila Bulletin* with 21 (Bacon & Nash, 2006 p. 13). A Factiva database search of *Jakarta Post* revealed that in June 2007, the Indonesian English language paper had even more articles than *The Daily Star* with more than 150 articles dealing with environmental issues. This would suggest that, as we expected, the global news agenda has increasingly focussed on the environment. World Environment Day which is the focus for media events fell during this month.

The Bangladesh Environmental Journalists' Forum, an organisation of journalists to promote environmental concerns in newsrooms as well as in the public arena, argues that through their efforts, the level of coverage of environmental issues increased each day from an average of 20 column inches in the 1970s and 1980s to 50-200 column inches now (Chowdhury, 2007).

For this project, the articles were divided into news and non-news which included all commentary, editorials and features (see Figure 1). More than 60 percent of the items in each newspaper were news. There was, however, a substantial amount of non-news with *Daily Ittefaq* having the most with 63 percent. When a comparison was made with the proportions of non-news in the 2005 study, only the *Jakarta Post* had more than 30 percent of non-news items. Even allowing for the small samples, this is quite a striking difference. The *South China Morning Post* (Hong Kong, China), the *New Straits Times* (Malaysia), the *Bangkok Post* (Thailand), the *Manila Bulletin* (Philippines) and



the *Sydney Morning Herald* (Australia) in the 2005 study, all had more than 80 percent news items suggesting that the coverage in these three Bangladesh newspaper is less dominated by shorter news items.

When the non-news category for the Bangladesh newspapers was further analysed, there was far more commentary by non-staff experts than features in the form of extended reportage. It is considered by two of the authors who have themselves worked in Bangladesh that this reflects the lack of time and other resources available in the media to do in-depth reportage. This is consistent with journalists and editors seeing themselves as active agents in opinion formation in the environmental field, often chastising government officials and encouraging the whole society to improve its protection of the environment. Compared to the English language Asian newspapers in the earlier study, these newspapers provided more room for pro-environmentalist commentary and analysis.

Subject matter covered by Bangladesh newspapers

The main subject matter of each story was coded using similar categories to

Figure 2: Proportion of articles about environmental topics

Subjects	Shamokal	The Daily Star	Daily Ittefag
Water	15%	14%	25%
Forest	15%	7%	10%
Air	1%	1%	-
Land	38%	38%	32%
Energy	2%	2%	0%
Flora/Fauna	3%	5%	9%
Media events	3%	9%	12%
Companies	1%	-	-
Global warming	13%	14%	6%
waste	4%	.9%	4%
Other	1%	4%	9%

the Bacon and Nash 2005 study (Bacon & Nash, 2006, p.15). The results can be found in Figure 2. Stories about land formed the biggest category with more than 30 percent of all environmental stories during the month being about land issues. This contrasted starkly with the earlier study in which there was negligible coverage about land in any of the newspapers. In such a densely populated country, encroachment on parkland and riverbanks is a continual problem. Most of the stories however during this month were about a catastrophic landslide that killed more than 100 people (see p. 23). Stories about water pollution and water logging were the next biggest category especially in Daily Ittefaq in which 25 percent of stories were about water issues, and 57 percent about either land or water. With the IPCC grim warnings for Bangladesh only a month or so old, it was not surprising that global warming was the third biggest category with 14 percent of stories in The Daily Star and 13 percent in the younger, less traditional Shamokal newspaper. By contrast, there were markedly less (6 percent) in the more traditional Daily Ittefaq. Of course, these figures mean little without more detail about the nature and quality of the information in the stories.

Sources used in environmental news

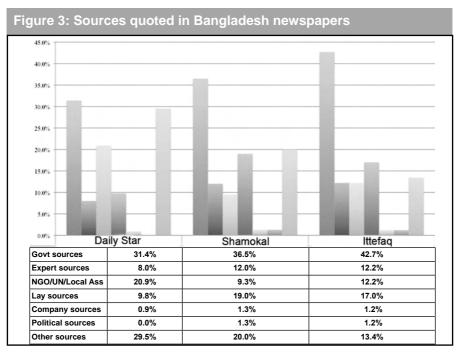
A striking characteristic of the coverage was that in more than 70 percent of Daily Ittefaq stories and 66 percent of the Shamokal stories did not directly

quote any sources at all. On the other hand, all but 20 percent of stories in the English language *Daily Star* did quote sources. This was just a little less than the *Vietnam News* in the 2005 study, which had 24 percent of stories with no direct quotes, compared to the other papers, all of which had less than 15 percent. This finding is consistent with the high level of non-news analytical or opinion pieces (which do not usually involve interviews). Even many serious allegations of corruption and neglect in news stories were delivered in the form of statements by reporters rather than sourced to particular people or organisations.

Who gets a voice?

In analysing who gets a voice in these three outlets, we included opinion pieces that were produced by a large range of people, including ex-ambassadors, journalists, retired teachers as well as representatives of both local and international NGOS.

The largest group of sources in each newspaper were government sources. Daily Ittefaq, which traditionally has been close to government, had the highest with 42 percent of all sources compared with the Shamokal with 36.5 percent and *The Daily Star* with 31.4 percent. At first glance, this tends to confirm Davis's finding (2000) that most empirical studies of sources have confirmed the view that journalists over access government sources, thereby legitimising and amplifying their power (see Figure 3). However, a closer examination of The Daily Star and the Shamokal reveals that quite a few of these sources are in fact either in conflict with other government sources, or unnamed government sources who are passing information to reporters without approval. Such 'unofficial sources', when used first in an article, can frame the 'reality' against which official government sources may be asked to respond. When used in this way, these unofficial sources cannot be described as 'primary definers' in the sense of powerful or authoritative figures but are nevertheless used by journalists to construct their 'web of facticity' in making allegations of corruption and abuse. The readers in Bangladesh understand that when journalists quote 'unofficial sources', information has been passed from inside government organisations directly to the media. They believe the stories not because of the sources' authorised status but because they know, through their own experience, that corruption is happening on a daily basis in official decision-making. In this way, the sources gain legitimacy. The credibility



of the story depends on the reporter shaping a meaning for their audience that is believable. These journalists and 'unofficial sources' appear to be in a symbiotic relationship across the media and government fields, mutually 'playing a game' to expose corruption and malpractice (Benson & Neveu, 2005). We tend to agree with Berkowitz who argues that the interaction between journalists and sources needs to be understood in its specific context and that research findings about source interactions in Anglo-American style journalism may not necessarily apply in other contexts (Berkowitz 2009, p.111).

Political sources in all three newspapers were extremely low because during June 2007, Bangladesh was under a caretaker government backed by the army and no political party was in power. Company sources, which are prominent in Western and some Asian media environmental coverage, were also very low. This may be explained by an overall lack of media scrutiny of the impacts of foreign investment in Bangladesh, the high involvement of the government in the economy and because local companies are less organised to access the media than those in more developed economies.

While government sources were dominant, the Bangla language news-papers interviewed a greater proportion of ordinary people about the impact of environmental issues on their lives (the *Shamokal*: 19.0 percent; *Daily Ittefaq*: 17.0 percent) than *The Daily Star*. This perhaps reflects the more elite status of *The Daily Star* and its readers. *The Daily Star* also had a high proportion of 'other sources' because it runs quite detailed reports of public seminars on social issues in which it names a wide range of community speakers. The Bangla language newspapers also used a greater proportion of experts (e.g., geographers and scientists) than *The Daily Star* which relied more on NGOs, the United Nations and community groups. This reflected the stance of *The Daily Star*, which is closely aligned with NGOs and unlike any newspaper in our earlier or any mainstream newspaper in Australia explicitly defines its role as building and promoting 'civil society' alongside, and sometimes in opposition to government.

In continually urging government action to protect the environment, *The Daily Star* overtly campaigns on environmental issues. During 2009, it has campaigned even more actively on the environment, launching a campaign to save the rivers of Bangladesh. Rather than being in a weak position in relation to other fields as has been suggested by theorists applying a Bourdiean field analysis to Western journalism (Benson and Neveu, 2005), journalism in Bangladesh attempts to carve out for itself an overtly active role in shaping government policy, although the effectiveness of this attempt can be neutralised by the overall political framework in which it operates.

While assertive, the Bangladesh press is more active in holding the government accountable than private companies. This compares with the finding in the early Nash and Bacon study which found the *Jakarta Post* to be the most assertive newspaper in its coverage of environmental issues but particularly in relation to companies, including foreign companies (Bacon & Nash, 2006, p. 17).

Case studies

Apart from longer opinion pieces or reports of seminars and events, much of the coverage of the environment is framed by a sense of crisis and disaster. In this section, we will explore the coverage of two stories to achieve a better understanding of the reporting practices.

Case theme: Landslides

On June 11, a landslide occurred in the port city of Chittagong when heavy monsoonal rain and tidal wave caused a huge mudslide which engulfed housing and killed more than 100 people. The media had previously warned that such an event could occur due to illegal hill cutting for development. From the beginning, all three papers extensively covered this story, and blamed this 'man-made' disaster on corrupt and inefficient government departments. There were a number of follow-up stories revealing the potential danger of illegal cutting of hills in other areas of the country. The coverage of the disaster included descriptions of the slippery mud, comment on the cause of the landslides, and allegations about corruption and inefficiency amongst politicians, public officials, and private development agents.

The Shamokal, 13 June 2007

Headline: Man-made disaster

This is a special report on the cutting of earth away from hills. This story explicitly points the finger at corrupt politicians, and public officials who collaborated with them. It used extensive named sources from relevant public bodies, such as the city corporation, academics and activists from non-government organisations to comment on the disaster. The reporter (Kazi Abul Mansur) identified a number of reasons for the sudden mudslide, including indiscriminate cutting of hills, blockage of the storm water drainage system, creeks and canals caused by negligent construction. The reporter wrote,

Investigations revealed that more than 250 hills of different sizes had been destructed during the last 25 years in Chittagong...around 15 residential areas had been built during the last 15 years. The influential quarters engaged in selling residential plots at exorbitant price are involved in the cutting of hills.

'Influential quarters' is a term widely used in Bangladesh's media to refer to a clique of rich business people and corrupt political leaders at various levels. The reporter alleged that these people overrode restrictions for cutting hills for development by bribing public officials to issue leases and permits allowing residential developments.

While the reporter does not reveal any direct evidence of corruption, he does refer to 'investigation' implying that he has carried out his own inquiries

and supports his allegations by non-government and academic sources. In this situation, the journalist could be said to be relying on his own reputation or cultural capital as a long-time experienced reporter and on the readers' sense of the corruption as a daily occurrence in the city.

The report provides an example of the contestation between different sources (Schlesinger, 1990) in Bangladesh newspapers. In this story, expert sources directly held influential quarters responsible for such disaster. The acting mayor of the City Corporation tried to deflect the accusation by saying that 'influential quarters' were not solely responsible for the incidents. By quoting the mayor, the reporter was fulfilling journalistic requirements for 'balance' but nevertheless structured his story to prefer his 'truth', which he signals by using the word 'investigation', supported by opinions of non-government and academic sources.

The Daily Star, 12 June 2007

Headline: Mindless hill-cutting caused mudslide

This asserts that the destruction of more than a hundred hills in and around Chittagong region caused the huge and destructive mudslide. The report began by using a university professor and a lawyer to explain the impact of the 'mindless hill-cutting' (Roy, 2007), using directly quoted sources:

'We warned several times that the places where landslide occurred had become vulnerable due to hill cutting. But proper measures were never taken to stop the practice,' Dr Shahidul Islam, geography professor of Chittagong University, told *The Daily Star* over telephone yesterday. Dr Shahidul conducted a survey that came up with the findings that over one hundred hills have disappeared due to hill cutting during the last 30 years....ASM Maksud Kamal, national expert, Earthquake and Tsunami Preparedness, UNDP, said no risk of landslide is involved if the hills are cut with a slope of 20-30 degrees. But the hills in Chittagong were cut with slopes of 70-80 degrees, making those hills highly unstable. (Roy, 2007).

The article then goes on to quote 'an environmental activist' working in Chittagong as saying: 'influential political leaders, truck owners' association, contractors, brick kiln owners, real estate developers and local goons used to conduct the hill cutting business through managing some government officials concerned. In many cases, they worked as a syndicate and as several influential leaders of big political parties operated the hill cutting business from behind the scene.'

In this report, produced immediately after the landslide, the *Daily Star* establishes its general position on the mudslide by using sources strongly supporting the newspaper's view. No government sources are quoted, although it is possible that they were not available.

The Daily Star, 16 June 2007

Headline: Hill cutting rampant defying ban, danger of disaster

This special front page report was sent to Dhaka several days after the disaster from Chittagong (Majumder, 2006). In comparison to the previous items, this report uses a wider range of sources. Quoting unnamed forest official sources, the reporter makes more specific allegations than previously and states that despite a government prohibition on hill cutting, a group of corrupt government officials and local influential people has been engaged in clearing hills and extracting soil, selling them to other parts of the country in construction sites and for bricklaying purposes. The reporter then quotes a trucker who says: 'Supplying soil has become a profitable business as it needs only a little investment. A truckful of hilly soil sells at Tk. 500.' The article then quotes Fazle Elahi, president of NGO Global Village who had made previous complaints as saying that 'nothing fruitful came (of the complaints) as the hill-cutting syndicate comprising local political leaders, government officials and law enforcers continued business as usual'.

In all, this investigative story employs six sources including one anonymous, one non-government organisation source, one local source and three senior level regional government official sources. In response, two officials are quoted, neither of whom addresses the allegations directly. One forestry official acknowledged the grave danger but said an 'integrated approach' was necessary while the Superintendent of Police Mohammad Abdul Kader 'expressed alarm about the disaster that looms' and said steps were being taken to act on complaints.

This story reveals fresh information about a matter of public concern by independently collected evidence. Responses from those in authority are sought. As such, this story can be seen as a piece of investigative journalism in which the reporter constructs the 'web of facticity' according to what he has found to be the truth. First hand observation, expertise and authoritative sources are used to build a credible narrative. While 'balance' is achieved by getting responses to the allegations, the story is constructed to persuade the

reader that responsible government officials have failed to protect the public. It can be seen here that this newspaper is again prepared to stake out its place in opposition to the government. Although the culprits are not named, the copy is written in a way that readers would draw on their own knowledge to reach conclusions.

The Daily Ittefaq, 15 June 2007

Headline: Govt ordered to stop illegal hill cutting

This general item reports on a visit by the Communications Adviser (member of the interim administration then in office, and equivalent to a minister in a regular government) in the landslide-affected disaster area of Chittagong. The adviser ordered all residential housing planning in the affected area to stop. Evidently, as an 'authorised knower' (Ericson et al. 1989), this high-ranking official is trying to impose the government's definition on events by responding to journalists' investigations about allegations of corruption, but without shouldering any responsibility.

Overall, this case study shows that the media played an active role in attributing the cause of this environment disaster to corrupt and negligent officials. Despite this, in follow-up stories the government is given ample opportunity to recover its image through stating what action it is taking to solve the problems. In reasserting its position, the government is assisted by its underlying powerful position, media time pressures and lack of journalistic resources to further investigate.

The reassertion of the government's position can also fit into the notion of 'development journalism' (Richstad, 2000; Xiaoge, 2009), which does not necessarily imply government control of news media, but rather the notion that the media works in cooperation with the government and other non-government organisations for the benefit of the country.

Case theme: Global warming and heatwave

During the first part of 2007, the Intergovernmental Panel on Climate Change progressively released its report containing dire long-term warnings for Bangladesh and other coastal countries (IPCC, 2007). So it is not surprising that global warming was firmly established on the news agenda. June was also dominated by an extreme heat wave that led to cuts in electricity generation and water treatment plants in major cities. Each of the newspapers linked the heat wave with environmental issues. Some reports emphasised

local environmental issues connected to the inefficiency of public utilities, poor planning and rapid development while others suggested the heatwave was an indication of how conditions could deteriorate further if rapid action was not taken to stop global warming.

Significantly, while media in the United States and Australia were still debating whether or not human-induced climate change existed (Newman, 2008), newspapers in this impecunious developing country editorialised about the urgent need for the international community to take action and were already holding the developed 'West' responsible for significantly contributing to the environmental threat. *The Daily Star* also published long features by environmental journalists and an ex-teacher summarising United Nations and other reports analysing how rising temperatures would cause illness including malaria epidemics and add to already existing unsafe water problems. (A Factiva database search establishes that these reports were scarcely mentioned in the Australian media at this time.)

The Shamokal, 1 June 2007,

Headline: Heatwave will continue for more days-12 died

This story describes the risk to the public of the continuous heatwave including failures in electricity and water. Quoting a number of the newspaper's district correspondents, the report claims 12 people have died because of excessive heat. It lists victims' names but does not establish the source of the claim that the heatwave has caused the deaths. No relevant sources such as local doctors, health officials or close relatives are cited. The report also mentions that 41 degrees Celsius, the highest temperature in three years, may not seem high, but leads to unbearable living conditions for urban dwellers without water, electricity or adequate housing. The report notes that the monsoon rains are arriving later than usual.

The Shamokal, 1 June 2007

Headline: Capital is turning into a hot island

This story reports on extreme dry and hot conditions in the country's capital Dhaka, which it refers to as a 'hot island'. Quoting sources from the meteorological department, climate and water experts and environmental advocates, the report links higher temperatures with unplanned urbanisation which has destroyed parks and a dramatically increased concrete surface area. The extremely high-density population and buildings mean air cannot

circulate and is polluted by the increased use of fossil fuels. The story quotes a spokesperson from the Bangladesh Environment Movement who clearly links deteriorating weather conditions to public administration mismanagement.

The Shamokal, 2 June 2007

Headline: 10 died from Heatstroke in four districts

This is a compilation of reports from correspondents across the country which describes how people are falling sick and dying from simmering heat which is linked to global warming. Again, it does not provide specific sources for these claims. The reports also criticise the public utility service agencies for failing to provide adequate and efficient services.

Two of the above reports lack any supporting evidence for the factual claims, which it can be argued, weakens their credibility (Tuchman, 1978). There could be several explanations for this lack of attribution. It may be that the 'facts and figures' used for rising temperature, acute water crisis and electricity were 'information subsidies' supplied by public departments (Gandy, 1980, quoted in Davies, 2000), which the reporter did not want to acknowledge. Alternatively the organisational culture may be one in which such facts do not need verification or the approach may reflect the individual practices of the reporter (see also Patterson & Urbanski, 2006).

Of the three papers, *Shamokal* went furthest in linking global warming with the heatwave, although it did not verify or quote sources which supported its claim.

The Daily Star, 5 June 2007

Headline: Bangladesh to be worst victim of climate change

This report is about a World Environment Day seminar on climate change. Quoting one speaker, the report asserts Bangladesh should form an alliance with other South Asian countries and demand compensation for climate change from 'developed' nations. The news report also describes dramatic threats to Bangladesh's future food production and increased permanent salinity in the country's coastal areas.

This and other similar reports of other climate change seminars demonstrate how different NGOS are involved in 'claim-making activities' (Hansen, 1993) to demonstrate their positions about environmental awareness in

the public domain. However, unlike NGOs in Western countries, such as Greenpeace (Hansen, 1993), which stage protest actions to gain media attention, Bangladeshi non-government organisations, rather than being marginal, could be seen as closer to 'primary definers' in Hall's terms (Hall et al., 1978). They exert considerable influence on government policy and have strong connections to the United Nations and other global organisations. But like other sources, they adopt strategies to negotiate their presence in news media space, including public seminars that are reported in much more detail than in Western media.

Despite some lack of sourcing, these stories and editorials linking the effects of the heatwave with the predicted future impact of global warming, demonstrate that Bangladeshi media and broader audiences are actively shaping perceptions of global warming and its impacts. While many millions of citizens cannot read the newspapers, their narrative of urgency, dire warnings and accusations against international and local bodies who fail to act will percolate to other media and broader audiences.

Conclusion

A comparative approach to reporting practices, including study of the interaction between journalists and their sources, provides insight into the broader relationships between the field of journalism and other fields, including those involving government and non-government activity. This small study has demonstrated that as elsewhere, environmental reporting in Bangladesh is a strong and growing sub-field of journalism with its own specific characteristics and relationships with other fields, as well as similarities with journalism elsewhere.

Compared to an earlier study of English language newspapers published in this journal (Bacon & Nash, 2006), Bangladesh newspapers, particularly *The Daily Star* and *The Shamokal* exert considerable agency, often in alliance with non-government organisations and insider 'off the record' government sources, in seeking to define national environmental policy and action. It is acknowledged that in making their 'truth claims', the newspapers often lacks 'on the record' evidence to fully verify their allegations, relying on Bangldeshi audiences' ability to interpret the journalists' meaning.

The existence of anthropogenic climate change is accepted in Bangladesh and the focus is on the impact and amelioration, the attribution of blame and

compensation from the West. This compares with coverage in the United States and Australian media where more emphasis has been placed on debating the science (Boykoff & Rajan, 2007; Newman, 2008). Although the existence of global warming has been increasingly accepted in the Western media, most coverage of global warming is about the impact of policy initiatives, such as carbon emissions trading schemes, in national economic and political fields.

If sustainable global solutions are to be found, it is important that citizens can perceive what the impact of environmental problems might be on those beyond their national borders.

For English language-only readers outside Bangladesh, the online edition of *The Daily Star's* 'first draft of history' provides a much closer look at how environmental issues are unfolding in this part of South Asia than can be found in either Western media or on Western environmental organisation websites.

The Australian Centre for Independent Journalism intends to carry out further comparative research on specific environmental issues, including climate change, in different Asia-Pacific contexts.

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