

1-2001

## Sustainable news: A profile of journalists who tell the story of Asia's environment

B. Massey  
*University of Utah*

S. Ramanathan  
*Mediaplus Consultants, Singapore*

Follow this and additional works at: <https://ro.uow.edu.au/apme>

---

### Recommended Citation

Massey, B. and Ramanathan, S., Sustainable news: A profile of journalists who tell the story of Asia's environment, *Asia Pacific Media Educator*, 10, 2001, 112-126.

Available at: <https://ro.uow.edu.au/apme/vol1/iss10/14>

# Sustainable News: A Profile Of Journalists Who Tell The Story Of Asia's Environment

This article reports on a preliminary profile of Asian environmental journalists. Demographic, news-topic priority and Internet-use variables were tested on a convenience sample of print journalists from 18 countries. On average, they reported on the environment at least weekly, but there was generally little correspondence between the subjects of their reporting and their perceptions of their countries' most serious environmental problems. Yet they showed a promising potential for strengthening their coverage by using the Internet as a research and networking tool.

Brian Massey  
University of Utah

Sankaran Ramanathan  
Mediaplus Consultants, Singapore

**N**ews consumers generally know what they know of environmental risk by what journalists choose to tell them and how they choose to do the telling. The breadth and depth of people's understanding of such vexing problems as pollution and deforestation depend on the breadth and depth of journalists' reporting.

For most people, environmental risk is an "unobtrusive issue" (Ader 1995: 301), something they do not directly experience. In this sense it is a distant reality, "out of sight, out of mind". People naturally find little reason to concern themselves with an environmental problem they do not experience first hand or do not believe poses a direct, immediate threat to their lives. Even a directly witnessed environmental risk could be perceptually placed "out of mind" – simply ignored or denied for any number of cognitive or behavioural reasons.

It is within this challenging milieu that environmental journalists work. On the one hand, people need journalists to "tell them how important an issue the environment is. Individuals do not learn this from real-world cues" (Ader 1995: 310). On the other hand, telling the environment's story is not a straightforward process. Arguably, two sources influence the quality and scope of the telling. One source could be defined as those news-media organizational factors and workday

*AsiaPacific MediaEducator, Issue No. 10, Jan - June 2001*

**Constructing  
the environment  
for the public**

in the environment's case, they arguably are obligated to provide understandable, in-depth, continual and serious coverage of risk issues. The need for this kind of ideal environmental reporting is universal; it is not confined to any particular region of the world. Even so, this need perhaps is nowhere more acute than in the world's industrializing regions, such as Asia.

Most Asians live in the midst of many, varied and seemingly intractable environmental problems (United Nations Environment Program 1997a; United Nations Environment Program 1999). Several causes have been blamed for these problems, from traditional and tightly held agriculture and resource-use practices, to endemic poverty, and the recent and rapid industrialization and urbanization of a number of Asian nations (United Nations Environment Program 1997b). These, and other likely causes, are often complex, interconnected and, in many instances, difficult to overcome.

Collectively, Asians "suffer air and water pollution, lack of basic sanitary facilities and depletion of tropical forests and wildlife species".

Countries, which have achieved unprecedented economic growth, have done so, at least in part, by opting for economic development in preference to environmental protection. Thus, the challenge is for Asian countries to ensure that care of the environment becomes an integral concern in the development process. (Ramanathan 1999: 1)

The challenge for Asia's news media is to ensure that care of the environment becomes a public concern. According to Friedman and Friedman (1989), environmental journalists in Asia believe strongly that they play a pivotal role in increasing the public's awareness of environmental issues, and in mobilizing participation in protection and conservation activities. On the other hand, Siriyuvusak (1993) argues that environmental journalism in Thailand over-emphasises such self-interested public relations events as 'green' campaigns by large industrial concerns that may be among the country's biggest polluters. Thai journalists also tend to judge the newsworthiness of environmental events by traditional news values, which can lead to an over-emphasis on conflict, rather than co-operation, between competing groups. Weerackody (1993) also finds fault with journalists in Sri Lanka, arguing that with few exceptions they are indifferent towards environmental news. Yakub (1993) argues that it is the norm for Bangladeshi journalists to provide "routine coverage of environmental issues and activities that is usually very superficial" (p. 54).

Siriyuvusak, Weerackody and Yakub offer an admittedly incomplete assessment of the state of environmental journalism in Asia. Their critiques are based on largely anecdotal evidence and focus on three countries. In all fairness, their assessments were made about eight years ago and the situation has changed considerably, not only with

environmental-risk news also is likely to believe that most other people are highly concerned about the reported issues. An individual's estimate of a community's majority opinion towards a risk issue "may be largely dependent on how [that] individual perceives the ... problem" (Major 2000: 236). Choices journalists make in their environmental reporting may thus be a contributing factor that influences how communities perceive an environmental problem and its importance.

One choice available to journalists is whether to provide sustained coverage of a particular risk issue, as opposed to one-shot, or 'spot news', reporting of environmental events as they occur. The literature suggests that by opting for the former – by choosing to keep an environmental risk in the news over time – journalists can have a powerful effect on the public agenda. A study of environmental-news reporting in Japan, for example, found that journalists are able to "exert [a] significant influence on public awareness, attitude and behaviour ... by keeping extensive coverage of environmental issues over a longer time span" (Mikami, Takeshita, Kakada & Kawabata 1995: 225).

However, deep, long-term reporting of environmental-risk issues appears to be the exception. Their critics argue that as a general rule, environmental journalists fail to provide this ideal level of coverage. They are faulted for sensationalistic reporting, for focusing narrowly on the crisis and drama of environmental events, and for not fully and publicly vetting the broader contexts of and possible solutions to environmental problems (Daley 1991; Bendix & Liebler 1991; Greenberg, Sachsman, Sandman & Salomone 1989; Wilkins & Patterson 1987; Morris 1981). Journalists also are criticized for reporting more on far-away risk issues, while virtually ignoring those found within their own communities (Hungerford & Lemert 1973; Murch 1971).

Ramanathan (1999) suggests that for a lack of specialized knowledge, many journalists are unable to provide their audiences with plain-language translations of important scientific concepts about the environment, or by extension, fully comprehend environmental problems themselves. Because of this knowledge deficit, journalists may be more likely to accept uncritically, and pass on to their audiences, a techno-jargon understood by few beyond the experts and officials who provide information for their reports. One consequence could be that the environment's story is transformed into an alienating "form of distant-public discourse – the voice of a scientific and elite culture as opposed to [ordinary people's] concerns" (Burgess, Harrison & Maitery 1991: 517). People conceivably would be less likely to attend environmental news if they perceive it as more confusing than illuminating.

If one accepts the notion that journalists have a social responsibility by virtue of their potential to influence the public agenda, then

## Research questions

account of environmental risk. One plausible explanation could be that journalists themselves do not fully understand the environmental subjects of their stories.

Yet today, journalists could go online to improve their coverage – and personal knowledge – of environmental issues. The World Wide Web of computer networks linked through the Internet offers nearly instant access to reports, commentaries, news reports and other information about global and country-specific environmental problems. Also, journalists could cultivate new approaches to environmental reporting by using Internet-transmitted electronic mail to network with their counterparts in other parts of the world. Tapping into the Internet conceivably would help journalists give their audiences a more balanced, complete and widely understandable accounting of environmental risk. It offers them a new set of choices for telling the environment's story, provided they have access to it and the skills necessary to use it. This suggested the following research questions:

RQ3. What are the levels of skill among environmental journalists in Asia for using the Internet's various features?

RQ4. To what uses are they currently applying the Internet?

The study discussed is an exploratory effort that involved a secondary analysis of data collected by the Asian Media Information and Communication Centre for the purpose of developing three training workshops for Asian environmental journalists.<sup>1</sup> Two of the workshops were held in 1998, first in Singapore for 20 Southeast Asian environmental journalists and later, in Ahmedabad, India, for 13 environmental journalists from throughout South Asia. Both focused principally on strategies for managing environmental-information resources. The third workshop, in Singapore in 1999, focused on the economic aspects of environmental issues. It drew participants from Southeast and South Asia, the People's Republic of China and Papua New Guinea.

In most cases, the participants were selected through their local environmental-journalism association. Two journalists were invited from each of the 18 nations represented at the workshops. AMIC required that one of the participants be drawn from a country's local-language press and the other from its English-language press, where applicable. Most of the participants were print journalists.

AMIC mailed each participant a four-page questionnaire, to be completed and returned ahead of the workshops. Initial non-responders were given the chance to participate in the survey during the workshops. In all, 49 of 53 journalist-participants completed the questionnaires for a 92.5% response rate. For the purposes of the current work, the respondents were considered to constitute a convenience sample of Asian environmental journalists.

regard to the milieu in which they operate, but also vis-à-vis training for environmental journalists.

It is clear that Asian journalists do report on the environment. What is not clear is how well do they do it. The broad literature on environmental news – which predominantly considers Western practice but also includes some study of Asian media – suggests that journalists can powerfully influence the public's agenda through sustained coverage of environmental-risk issues. Yet it also suggests their coverage often falls short of that ideal. It arguably comes down to the journalistic processes that produce environmental content and more importantly, to the journalists who stand at the head of those processes.

Environmental content, like any news story, is built from the reporting choices journalists make. They choose which information to gather and sources to interview –

and which to pass over. Later, they cull their collected facts, selecting some to include in their stories and some to hold back, some to emphasise greatly and some to downplay. It is thought that these choices are guided by organizational norms and established work routines (Shoemaker & Reese 1996; see Weaver & Wilhoit 1996), such as traditional definitions of 'news', newsgathering and story-construction methods, and production deadlines. But to an important extent, they are guided initially by journalists' backgrounds, characteristics and attitudes (Peiser 2000; see Shoemaker & Reese 1996; Wright 1988).

The choices journalists make for their stories, in the end, can influence people's opinions of the stories' subjects (see Ashley & Olson 1998; Edelman 1993; Entman 1993; Iyengar 1991; Kathneman & Tversky 1984). By extension, journalists' potential to shape the public's environmental agenda depends on how they choose to report on risk issues.

Therefore, focusing on Asian environmental journalists – as opposed to the content they produce – is a necessary step towards gauging how well the environment's story is being told in the region. One assessment criterion could be the degree to which Asian journalists are achieving the ideal level of environmental-risk coverage suggested by the literature. To test this, the following two research questions were posed:

RQ1. To what extent do Asian environmental journalists provide their audiences with sustained coverage of risk issues?

RQ2. To what extent do their news-reporting priorities correspond to what they see as the most serious environmental problems in their home countries?

Journalists have been faulted for under-reporting the broader aspects of environmental problems and for not explaining them plain language. As has been discussed above, critics argue that what the public gets is an incomplete, and often incomprehensible, journalistic

Demographically, the Asian respondents largely mirrored the U.S. environmental journalists surveyed by Valenti (1995). The AMIC workshop participants were essentially evenly divided by gender, at 25 males to 24 females. They were a relatively young group: the average age was 31.6, with a median age of 32. The youngest was 23 and the oldest, 53. They also were generally highly educated. Nearly two-thirds of them were university graduates: most held bachelor's degrees and seven had masters degrees. Three-quarters of all the respondents had received some form of professional or in-service training exclusive of the three workshops.

RQ1 asked about the frequency of environmental-news reporting in Asia. Forty-five respondents answered the corresponding survey question and among them, four (9%) said they give the environment daily coverage. Twenty-one of the respondents reported that they work on a story about the environment one to three times a week. Twenty reported working to a monthly or twice-monthly environmental-reporting schedule. All told, somewhat more than half of the 45 journalists (56%) provide their publics with environmental-risk news at least weekly, if not more frequently.

As Table 1 shows, female journalists and those from countries in Southeast Asia were more likely than males and South Asians to give relatively regular coverage to risk issues. Nearly two-thirds of the female respondents, but only about half of the males, said they work on a story about the environment once a week or more often. About two-thirds of the Southeast Asia respondents gave their audiences this level of environmental-news reporting, compared to about a third of those from South Asia.

RQ2 explored the match between the news-coverage priorities of environmental journalists in Asia and what they perceive to be the two most serious environmental problems in their countries. The risk issues and news-coverage assignments reported in the questionnaires were rank ordered by frequency of mention, and the results are reported in Table 2.

The often co-occurring problems of urbanization and industrialization topped the respondents' list of most serious environmental-risk issues in their home countries. They were named by 19 (41%) of the 46 journalists who completed this section of the survey. Environmental risks related to forests ran a close second, mentioned by 18 respondents. This was followed by environmental problems involving inland waters such as rivers (n=13). On the other side of the ledger, however, urbanization and industrialization – the two most frequently mentioned risk issues – were not high news-coverage priorities for the respondents. And no respondent acknowledged

The survey forms asked the journalists to provide basic demographic data about themselves. Several questions were aimed at their use of the Internet. The journalists also were asked to name the two specific subjects, or news beats, they covered most often and what they believed to be the two most pressing, specific environmental problems confronting their countries. Responses to those questions were later assigned by one of the principal investigators to broad, mutually exclusive general- and environmental-news categories.<sup>2</sup> The environmental-news categories were adapted from U.N. Environment Programme reports about environmental risk in Asia.

Thirty-one of the 49 AMIC questionnaire respondents (64%) were Southeast Asians from Brunei, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam. South Asians numbered 13 (27%) and represented Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka. Two respondents were from Mainland China, and two came from Papua New Guinea.

By job description, there were 29 reporters and 19 editors and bureau chiefs in the convenience sample. One respondent did not name a job title.

## Reporting priorities

Insert Table 1

reporting on inland waters.

'Public awareness' was the only entry on the respondents' environmental-risk list to also appear as a top reporting priority. It placed second, identified by nine respondents as a primary news-coverage responsibility. Forest and wildlife were the next risk issues to appear the list of news-coverage priorities. They tied for fourth, with the general news subjects of business and education. Social issues unrelated to the environment emerged as the number one reporting priority, named by 12 respondents.

Insert Table 2

The last two research questions explored respondents' use of the Internet. Nearly all of the 49 respondents (94%) had workplace access to the Internet at the time the survey was conducted. About three-fourths of them reported going online – from work or elsewhere – to send and receive e-mail, and only nine rated their e-mail skills as “basic”. Twenty of them (41%) said they also use the Internet to ‘read’ Web newspapers.

Nearly half of the respondents reporting using the Internet as a research tool, although only eight answered “very well” when asked to rate their proficiency with the Web search engines that one needs to conduct research online. Most of those who reported using search engines rated their skill as “fair” to “basic”. Still, about three-fourths of all of the respondents expressed the desire to learn how to use search engines or to learn more about online search strategies.

Our preliminary analysis suggests that focusing on the creators of environmental-risk content can be a fruitful method for exploring the scope of environmental journalism and, by inference, its potential audience effects. For example, the Asian journalists who participated in the AMIC workshops tended to tell the story of the environment in their countries with a notable degree of regularity. This could be taken as an encouraging sign for efforts to give a thorough public vetting to the region's environmental difficulties, given the potential of regular or sustained reporting to powerfully influence the public agenda. These journalists, by covering the environment regularly, may play a role in making their audiences aware of risk issues. Increased awareness is a crucial first step towards swaying people's attitudes about a community-wide problem and, ultimately, sparking a change in behaviours that contributed to its creation.

Also encouraging is the potential of the workshop participants to exploit online information and networking resources to improve their coverage of the environment in their countries. They conceivably could become more efficient in their work and self-educate themselves on complex environmental-risk issues by integrating the Internet more fully into their reporting routines.

However, the journalists in our convenience sample apparently do not function as fulltime environmental reporters. They tended to juggle several assignments, thereby leaving the environment to compete with other subjects for their news-coverage attention and a place on the media agenda. Moreover, the environmental subjects they said they covered did not convincingly match up with what they noted down as their countries' most serious environmental problems. This could be indicative of an ad-hoc form of reporting: dramatic environmental events are reported as they occur, but more enduring and more complex environmental problems generally are not.

## Internet use

## Conclusions

The survey did not explore why the journalists shy away from reporting on such long-running and complicated problems. One possible reason could be that they do not completely understand them. If so, this would highlight the importance of exploiting the self-education potential of the Internet. Another possibility is that they lack the time to fully develop these risk issues into news stories because they also are handling other reporting assignments. Alternatively, they may be constrained in some way from reporting on many of the risk issues they identify as serious in their countries.

The interaction between journalists' characteristics and their personal judgements of the environment as an important news subject is a phenomenon worthy of future research. Such work could shed new light on how the "journalist agenda" contributes to the media agenda that, in turn, has the potential to shape news consumers' attitudes of and behaviours towards environmental risk. Also deserving of future research are questions of the quality of journalists' understanding of environmental issues and the nature of any barriers they may face in telling the story of the environment in their countries. Subject knowledge and reporting constraints potentially influence the formation and subsequent exercise of a "journalist environmental agenda".

We acknowledge that the current study is preliminary, largely due to the limits imposed on it by our sampling method. Participants in the AMIC-led workshops offered a convenience sample of Asian journalists with a shared professional interest in the environment as a news subject. The next step would be to constitute a larger, and hence more reliably representative, sample of Asian environmental journalists. It should include both print and broadcast newspeople, and be subjected to a fuller range of relevant "journalist agenda" variables. That way, a more complete profile of the tellers of Asia's environmental story may be developed.

### NOTES

1. The three AMIC-led environmental-journalist training workshops were supported by the Asian Development Bank, Economy & Environment Program for Southeast Asia (EEPSEA), IDRC, and UNESCO. The AMIC workshops were conducted in collaboration with the Centre for Environmental Education (CEE) in Ahmedabad, India, and the School of Communication Studies at Singapore's Nanyang Technological University.
2. General news' was defined as stories about events or issues that were not directly related in immediately obvious ways to the environment or environmental problems. The general-news coding categories were largely self-evident in their definitions and included nine mutually exclusive choices: 'agriculture'; 'business'; 'crime/law and order'; 'civic/social issues', such as children's or civic issues, consumer affairs, health, human rights, and religion; 'education'; 'politics'; 'sports'; 'technology'; and

'other'. By 'environmental news', we mean stories about events or issues of immediately obvious connection to the environment or environmental problems. The environmental-news coding categories include 12 mutually exclusive choices. 'Agriculture', for example, referred to such environmentally sensitive issues as the use of pesticides or shifting/traditional cultivation practices. 'Air pollution' include industrial or vehicle emissions. 'Public awareness' is defined as stories about efforts to promote public awareness of the environment, sustainable development and sound resource management. The 'coastal/marine' category refers to environmental risks related to seas and their shorelines while rivers, lakes, streams and the like were covered under the category 'inland waters'. 'Forest' refers to such environmental issues as deforestation and illegal logging. 'Transboundary pollution' covers environmental degradations that crossed national borders. 'Urbanization/industrialisation' refers to such non-air-pollution issues as population growth, poverty, water shortage and waste disposal. Issues relating to smuggling plants or animals, poaching, biodiversity and wildlife conservation are coded under the 'wildlife' category. 'Human interaction with the environment' refers to those environmental issues that involve people but which are not explicitly covered under the other environmental-news categories, i.e., over-development, inequitable distribution of the benefits of development, and conflicts of interest. An 'other' category was established for general or non-specific responses.

## REFERENCES

- Ader, Christine R. (1995), "A longitudinal study of agenda setting for the issue of environmental pollution," *Journalism & Mass Communication Quarterly*, 72, Summer: 300-311.
- Ashley, Laura and Beth Olson (1998), "Constructing reality: Print media's framing of the women's movement, 1966 to 1986," *Journalism & Mass Communication Quarterly*, 72, Summer: 263-277.
- Atwater, Tony (1988), "Reader interest in environmental news," *Newspaper Research Journal*, 10, Fall: 31-37.
- Atwater, Tony, Michael B. Salwen and Ronald B. Anderson (1985), "Media agenda-setting with environmental issues," *Journalism Quarterly*, 62, Summer: 393-397.
- Bendix, Jacob and Carol M. Liebler (1991), "Environmental degradation in Brazilian Amazonia: Perspectives in US news media," *Professional Geographer*, 43, November: 474-485.
- Brosius, H.B. and H.M. Kepplinger (1990), "The agenda-setting function of television news," *Communication Research*, vol. 17, no. 2: 183-211
- Burgess, Jacquelin, Carolyn Harrison and Paul Maitery (1991), "Contested meanings: The consumption of news about nature conservation," *Media, Culture & Society*, 13: 499-519.
- Daley, Patrick with Dan O'Neill (1991), "'Sad is too mild a word': Press coverage of the Exxon Valdez oil spill," *Journal of Communication*, 41, Autumn: 43-57.
- Dunwoody, Sharon, and Robert J. Griffin (1993), "Journalistic strategies for reporting long-term environmental issues: A case study of three Superfund

- sites," in Anders Hansen (ed.) *The Mass Media and Environmental Issues*, Leicester University Press, London: 22-50.
- Edleman, Murray (1993), "Contestable categories and public opinion," *Political Communication*, 10: 231-242.
- Entman, Robert M. (1993), "Framing: Toward clarification of a fractured paradigm," *Journal of Communication*, vol 43, no. 4: 51-58.
- Elliott, E., J.L. Regens, and B.J. Seldon (1995), "Exploring variation in public support for environmental protection," *Social Science Quarterly*, vol 76, no. 1: 41-52.
- Friedman, Sharon M. and Kenneth A. Friedman (1989), "Environmental journalism: Guardian of the Asian Commons," *Environment*, 31, June: 7-9, 31-32.
- Graber, Doris (1984), *Mass Media and American Politics*, University of Chicago Press, Chicago.
- Greenberg, Michael R., David B. Sachsman, Peter M. Sandman, and Kandice L. Salomone (1989), "Risk, drama and geography in coverage of environmental risk by network TV," *Journalism Quarterly*, 66, Summer: 267-276.
- Hansen, Anders (1991), "The media and the social construction of the environment," *Media, Culture and Society*, 13: 443-458.
- Hungerford, Steven E. and James B. Lemert (1978), "Covering the environment: A new Afghanistanism?" *Journalism Quarterly*, 50, Autumn: 475-481.
- Iyengar, Shanto (1991), *Is Anyone Responsible? How Television Frames Political Issues*, University of Chicago Press, Chicago, Illinois.
- Katheman, Daniel and Amos Tversky (1984), "Choice, values and frames," *American Psychologist*, 39: 341-350.
- Liebler, Carol M. and Jacob Bendix (1996), "Old-growth forests on network news: News sources and the framing of an environmental concern," *Journalism & Mass Communication Quarterly*, 73, Spring: 55-65.
- Major, Ann Marie (2000), "Correlates of accuracy and inaccuracy in the perception of the climate of opinion for four environmental issues," *Journalism & Mass Communication Quarterly*, 77, Summer: 223-242.
- McCombs, Maxwell and Tamara Bell (1996), "The agenda-setting role of mass communication," in Michael Salwen & Donald Stacks (eds), *An Integrated Approach to Communication Theory and Research*, Lawrence Erlbaum, Hillsdale, NJ: 93-110.
- Mikami, Shunji, Toshio Takeshita, Makoto Kakada and Miki Kawabata (1995), "The media coverage and public awareness of environmental issues in Japan," *Gazette*, vol 54 no. 3: 209-226.
- Morris, Roger (1981), "Buffaloed by the energy boom," *Columbia Journalism Review*, November/December: 46-52.
- Murch, Arvin W. (1971), "Public concern for environmental pollution," *Public Opinion Quarterly*, 35: 100-106.
- Peiser, Wolfram (2000), "Setting the journalist agenda: Influences from journalists' individual characteristics and from media factors," *Journalism & Mass Communication Quarterly*, 77, Summer: 243-257.
- Ramanathan, Sankaran (1999), "Facilitating communication of environmental issues in Asia," Paper presented to the International Conference on Communication in the Asia-Pacific Region: Towards the 21st Century, Selangor, Malaysia, April.
- Shoemaker, Pamela J. and Stephen D. Reese (1996), *Mediating the Message: Theories of Influence on Mass Media Content* (2nd ed.), Longman, White

- Plains, NY.
- Siriyuvasak, Ubonrat (1993), "Environmental discourses in the Thai media," *Forum Komunikasi*, 3, December: 26-38.
- United Nations Environment Programme (1997a), "Asia Pacific environmental issues: Major environmental concerns," in *Global Environmental Outlook-1* (1997) [accessed 6 June 2001]. Available at <http://www.unep.org/unep/regoffs/roap/GEO11.html>.
- United Nations Environment Programme (1997b), "Asia Pacific environmental issues: Underlying causes," in *Global Environmental Outlook-1* (1997) [accessed 6 June 2001]. Available at <http://www.unep.org/unep/regoffs/roap/GEO12.html>.
- United Nations Environment Programme (2000), "State of the environment: Asia and the Pacific," in *Global Environmental Outlook 2000* (online) [accessed 6 June 2001]. Available at <http://www.grida.no/geo2000/english/0062.htm>.
- Valenti, JoAnn Myer (1995), "Ethical decision-making in environmental journalism," Paper presented to the meeting of the Association for Education in Journalism and Mass Communication, Washington, D.C., August.
- Weaver, David H. and G. Cleveland Wilhoit (1996), *The American Journalist in the 1990s: U.S. Newspapers at the End of an Era*, Lawrence Erlbaum, Mahwah, NJ.
- Weerackody, Irvin. (1993), "Environmental policies and media reporting in Sri Lanka," *Forum Komunikasi*, 3, December: 39-45.
- Wilkins, Lee and Philip Patterson (1987), "Risk analysis and the construction of news," *Journal of Communication*, 37, Summer: 80-92.
- Wright, Charles R. (1988), *Mass Communication: A Sociological Perspective* (3rd Ed.), McGraw-Hill, New York.
- Yakub, Nerun N. (1993), "Media coverage of environmental issues in Bangladesh and its role in influencing policy and action," *Forum Komunikasi*, 3, December: 54-60.

BRIAN L. MASSEY, PhD is an assistant professor in the Department of Communication, University of Utah, USA. At the time of this study, he was a member of the School of Communication Studies, Nanyang Technological University, Singapore. E-mail: [tblmassey@yahoo.com](mailto:tblmassey@yahoo.com).

SANKARAN RAMANTHAN, PhD is the managing director of Mediaplus Consultants, Singapore. At the time of this study, he was a senior programme specialist and head of special-projects at the Singapore-based Asian Media, Information and Communication Centre. E-mail: [sankaran\\_ramanathan@hotmail.com](mailto:sankaran_ramanathan@hotmail.com).