

The
Green
Pen



Environmental Journalism
in India and South Asia

Edited by

Keya Acharya | Frederick Noronha



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To all the authors of this anthology
who have contributed so generously in good faith,
and to all the many journalists who have kept
India-EJ active and useful over the years.



Contents

Foreword by Darryl D'Monte

xi

Preface by Frederick Noronha and Keya Acharya

xvii

SECTION ONE

ENVIRONMENTAL JOURNALISM AND ENVIRONMENTAL REPORTING

- 1 Environment Stories, among the Most Challenging 3
Lyla Bavadam
- 2 This Separate Category 12
Kunda Dixit
- 3 Environmental Journalism at the
Time of Economic Liberalisation 20
Richard Mahapatra
- 4 Environmental Journalism since Economic Liberalisation 28
S. Gopikrishna Warriar
- 5 The Most Serious News 35
Sunita Narain
- 6 Writing about the Birds and the Bees 38
Keya Acharya
- 7 My Words, It's Still Fun! 45
Sudhendar Sharma
- 8 Problems of Aesthetics and Misplaced Altruism:
Media and Environment in Northeast India 51
Kazimuddin (Kazu) Ahmed



- 9 Good Journalism, That's All 59
Kalpna Sharma
- 10 Media is No Longer the Fourth Estate 64
Devinder Sharma
- 11 Lost in the Smog 72
Dionne Bunsha
- 12 Tourism and Beyond: Does Environmental Journalism Matter? 79
Frederick Noronha
- 13 Environment Journalism, Maldivian Style 86
Ahmed Zaki Nafiz
- 14 Uphill and Downstream in Pakistan 95
Beena Sarwar

SECTION TWO

SCIENCE, HEALTH AND THE ENVIRONMENT

- 15 Good Science, Environment Journalism and the Barriers to It! 109
Pallava Bagla
- 16 Environment, Exotic Diseases and the Media: Emerging Issues 116
Patralekha Chatterjee

SECTION THREE

WILDLIFE JOURNALISM

- 17 At the End of a Dark Tunnel, a Faint Light 127
Nirmal Ghosh
- 18 Tiger Defends the Biodiversity 135
Malini Shankar

SECTION FOUR

ENVIRONMENT AND WATER

- 19 The Media's Role in Water and Sanitation 151
Sahana Singh

- 20** Water Journalism Warrants Better Attention **157**
Shree Padre

SECTION FIVE

REPORTING ON DISASTERS

- 21** Dispatches from the Frontline: Making of
 The Greenbelt Reports **171**
Nalaka Gunawardene and Manori Wijesekera
- 22** Floods: Blacked Out but Real **184**
Sunita Narain
- 23** Turbulence: How Volunteers Cyber-Responded to a Tsunami **187**
Peter Griffin

SECTION SIX

PHOTOJOURNALISM

- 24** Stop All the Clocks! Beyond Text, Looking at the Pics **203**
Max Martin
- 25** What Does One Photograph Do To Depict a Flood? **208**
Shahidul Alam
- 26** It Was a Long Journey **213**
Nandan Saxena

SECTION SEVEN

COMMUNICATING ON THE ENVIRONMENT

- 27** Paradigm Shift in Agricultural Communication **225**
Shivaram Pailoor
- 28** A 'Global City' vs the Environment **232**
Ardeshir Cowasjee
- 29** Wild Panther in Miramar? Goa on the Verge of
 Environmental Hara-kiri **236**
Nandkumar Kamat

**SECTION EIGHT**

GENDER AND ENVIRONMENT

- 30** Reporting Gender and Environment: Beyond Tokenism **251**
Laxmi Murthy

SECTION NINE

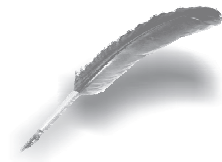
ENVIRONMENTAL MOVEMENTS

- 31** The Grass is Greener This Side **261**
Meena Menon
- 32** The Chipko and Appiko Movements **271**
Pandurang Hegde

SECTION TEN

AN ANIL AGARWAL READER

- 33** Media Games **285**
Anil Agarwal
- 34** Saying It with Pictures **288**
Anil Agarwal
- 35** No Screen Presence **291**
Anil Agarwal



Foreword

Darryl D'Monte

When I look back at 30 years of writing about the environment, I realise that many seminal occurrences are due to chance or intuition, rather than a clear-cut, well thought-out decision. I was editing the Sunday edition of *The Times of India* throughout the 1970s and my brief was to steer clear of politics. Business, I ought to remind younger readers, wasn't even an issue worth discussing those days: it was left to the Commercial Editor. Environmental issues were just beginning to become newsworthy.

One day towards the end of 1977, a slim green pamphlet landed on my desk titled 'Report of the Task Force for the Ecological Planning of the Western Ghats', not exactly a subject which would have set the Arabian Sea on fire. The 19-member task force was headed by the well-known naturalist Zafar Futehally and concluded, among other issues, that the Silent Valley hydel dam across the Kunthipuzha river in the western ghats in Kerala would destroy 'one of the last vestiges of natural climax vegetation of the region and one of the last remaining in the country... and various adverse ecological consequences will follow'.

I cleared a Sunday editorial on this report with my formidable editor, Girilal Jain, who was solely preoccupied with political issues. But he issued me a caveat, which I still recall: 'make sure your argument isn't unscientific'. Those days, the battle lines were clearly drawn: reason was on the side of the hard-headed 'developmentalists' and those who were opposed to them—and they weren't too many—were guilty of fuzzy thinking.

In the early 1980s, I resigned as the Resident Editor of the *The Indian Express* in Mumbai and was at a loss as to what to do. It occurred to me that I should write a book, dealing with three major environmental controversies of the time, in the context of the development versus environment debate. These were Silent Valley, the Mathura oil refinery near the Taj Mahal and the natural gas-based Thal Vaishet fertiliser plant near Mumbai.



When I applied for a Homi Bhabha fellowship to do the research, I was somewhat intimidated by the interview panel. The head of the Nagpur-based National Environmental Engineering Research Institute asked me how I, as a mere journalist, could possibly make sense of the mathematical ‘constants’ that are used in the complex calculations of how a smoke plume—from a refinery chimney in the case of the Mathura refinery—would land on a site 40 km away. I was not even aware of what constants were but, gathering my wits, replied that it was our job as journalists to be confronted by complexities we couldn’t understand every day of our working lives. Our task was first to comprehend these and then to convey them in a manner that readers could follow.

I had been active in the civil liberties movement till the mid-1970s. During the emergency, we had to disband the Association for Defence of Democratic Rights, because this could invite trouble. Soon after I began my research on the book in the 1980s, I met an acquaintance who asked me what I was doing. When I told her about the book, she admonished me: ‘So you’ve moved from being concerned about people to being concerned about things?’

The remark stung me at the time; such stray comments always catch you off-guard. I wondered if I had let the side down and abandoned my commitment to protecting human rights. It was only in the months to come, when I was engrossed in my research, that I realised that far from there being any disconnect with human beings, the environmental crisis lay at the heart of such concern. My intuition, I was happy to learn, hadn’t deserted me.

Later, Anil Agarwal struck a balance in the environment versus development debate by citing Gandhiji and his exhortation to look to the needs of the last man, the *Antyodaya*. If his needs are given topmost priority, the purpose of all ‘development’ schemes becomes transparent. Agarwal added a nuance when he stated that actually in this country, the last man is a woman, thus lending a gender dimension to the debate.

Most journalists, I suspect, come from a background in social sciences. I had studied economics but wasn’t aware at the time that both economics and ecology stem from the same Greek root—*oikos*, meaning home or house. Thus, economics is the science of good housekeeping, making sure that the household accounts are in order and expenditure doesn’t exceed income. Ecology, on the other hand, concerns itself with ensuring that the home is well stocked with resources that go into people’s well-being. There is now a respectable International Society for Ecological Economics.

I had to battle with unfamiliar natural sciences constantly during my research into these three quite diverse case studies for my book. Silent Valley, in particular, called for some insights into botany, forestry and zoology; the Taj case into chemistry and conservation, not to mention mathematics; and the Thal fertiliser plant into industrial location policy. Politics permeated each and every stage of the discourse. In Silent Valley, the threat to a rare species called the lion-tailed macaque, a denizen of this forest, led to a fiery debate between development and environment and prompted the pro-dam lobby to exclaim: 'Are monkeys more important than men?'

This was my baptism in environmental journalism and extended research. Earlier, as a Sunday editorialist in *The Times of India*, I had criticised conservationists for being uncaring about the conditions of tribals in forests. Later, environmentalists welcomed me to their fold and believed that I had crossed over. But I continue to argue that in this debate, humans and wildlife must co-exist, without one being promoted at the cost of the other. The argument got very heated over the recent report of the Tiger Task Force headed by Sunita Narain, who contributes to this book. Elsewhere, she asked a question which no one can easily answer: 'How is it that India's poorest people live in the most resource-rich areas of the country?'

In the 1980s, I was in Bandhavgarh National Park in MP when an adivasi was killed by a tiger as he was bending over the forest floor to collect some produce. More than my gory photographs of the hapless man, with his head nearly severed by a single blow from the mighty cat's paw, what lingers in my memory is the image of the forlorn widow, clad only in a tattered sari, without a blouse. Her legs were bow-legged with anaemia and I think, in retrospect, that even if she had been saved from the fury of the beast, she would have succumbed, sooner or later, to sheer starvation.

Baba Amte once described central India to me as the country's cummerbund, which is an apt metaphor, considering that this waistband contains the forests and minerals and some of the rivers which make up our natural wealth. Is it an accident that the Naxalite movement has taken root precisely in these most wretched regions, now extending to one-sixth of all the districts in the country? Many conservationists, in their admirable zeal to protect endangered animals, have not paid as much heed to endangered countrymen. In this book, Richard Mahapatra recounts some basic truths about poverty. The suicides of farmers is as much an environmental issue as it is a matter of agricultural and trade policies, not to mention the utter callousness of politicians.



I relate these personal instances not out of any exaggerated sense of my own contribution to environmental journalism but because they address many of the concerns expressed in this book. Speaking for myself, I am sometimes referred to in public as an environmental activist and sometimes as a journalist. When I was an editor, as I was when I rejoined *The Times of India* in the late 1980s, I never spoke about environmental issues on public platforms, confirming environmentalists' worst fears that I had become a member of the establishment! But I continued to write about the environment in this country and elsewhere in the newspaper. I prefer to call myself an environmental journalist and I see no harm in doing that. It requires a certain degree of specialisation, particularly with today's complexities regarding environmental treaties, trade and technology.

No such opprobrium attaches itself to being a business journalist or a political journalist. Why should environmental journalists feel defensive about themselves? As for the argument that it creates a special category which seeks privileges and is not subject to the same checks and balances as other forms of journalism, I think the proponents of this line of thought overstate their case. Do business journalists tell the whole, unalloyed truth, or are they susceptible to be swayed by particular interest groups, particularly in an era when media houses are themselves investing in companies? And, by the same token, are political journalists not guilty of planting stories to embarrass their sources' rivals? In other words, aren't they also 'committed' and not objective?

The admonitions that several contributors to this book address to environmental journalists actually apply to all scribes. There are good journalists and bad journalists on every beat. At the same time, there is certainly a strong case for not ghettoising environment by allocating a page or section to it every so often. It has to compete with other stories for the front page, the city page, the international page, the editorial page, the business section and even—as pollution issues during the Beijing Olympics indicate—on the sports pages. While that is true of the mass media, the fortnightly *Down to Earth* is one of the best environmental journals anywhere in the world.

There is actually a surge in environmental reporting throughout the world with the publication of the fourth report of the Intergovernmental Panel on Climate Change. The skeptics are being silenced, although they raise their head from time to time. It may well be true that this is a cyclical phase and that the environment will undergo a downturn in the years to come. But it is difficult to see how, with oil and food prices going through the roof. I would argue that it is the short-sightedness of the

media—particularly with the emergence of editors who don't write a line themselves these days—that is responsible for a general neglect of environment and development.

If one sees the international opinion polls on environmental issues conducted by the Toronto-based organisation Globescan, environment—particularly when it is linked to health—figures amongst the top three concerns in every society, both in industrial and developing countries, across all classes and communities. That is a message which politicians don't understand; that is a message which bureaucrats don't understand; but, most of all, that is a message which the media itself doesn't understand. An increasingly globalised media in this country is dumbing down with a vengeance, trivialising all issues: 'amusing ourselves to death'.

Ecology has been originally defined, as long ago as in the mid-19th century, as the study of the relationship between living organisms and the environment. Humans, as much as wildlife, are integral to its concern, which is why its variant has subsequently been termed human ecology. Ecology always enjoins us to look holistically at the entire picture, not one dimension of it. As Agarwal always emphasised, environment and development are two sides of the same coin, or two sides of the same tree trunk, as Kunda Dixit paraphrases in this book. As a die-hard environmental journalist, I can only hope: may the tribe increase!



Preface

We both belong to the second generation of environmental journalists in India, if you could call it that. Pioneers like Anil Agarwal and editors like Daryl DeMonte preceded us. So when we met up in Goa recently, and got talking about the changing situation in the environmental journalist scenario, a thought struck us.

Even as the environmental crisis gets worse, and even conservative business-as-usual politicians are getting around to accepting mega-threats like global warming, the space for environmental journalism is shrinking. Things are not as rosy as they once were.

The lack of demand could indeed kill the supply. Where is the next generation of environmental journalists from India going to come from?

In this context, the least we could do is to not forget our history. When we proposed to SAGE-India a book of this nature, our intention was to ensure that the upcoming generations could read about the past. Read and know what went into the field of environmental journalism in years not so long ago.

This book puts together the ideas and experiences of many women and men who reported from the frontlines and offers an engaging insight into the debate on environmental writing in our region through deep and varied viewpoints from seasoned journalists. We hope it will inspire an upcoming generation of journalists about what is possible.

We are grateful to SAGE-India for making it all possible.

Keya Acharya, Bangalore, keya.acharya@gmail.com
Frederick Noronha, Goa, fn@goa-india.org

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SECTION ONE

Environmental Journalism and Environmental Reporting



1

Environment Stories, among the Most Challenging

Lyla Bavadam

They are about issues that most people do not think are important. Often they do not directly impact peoples lives and so nobody sees the environment as their responsibility. Consequently, people have an ostrich-like attitude to issues till they are too big to ignore. Once they are out of control and are reported on, both the people who report them as well as the issues themselves are considered as problems. To make matters worse, what is reported is sometimes far from the reality. And the icing on the cake—till very recently environment reporting was considered a niche area of journalism not worth pursuing.

NO ICING, JUST BREAD AND BUTTER

Though lots of factors contribute to a high level of frustration for environment reporters, the aggravations are nowhere near as high as that of people directly involved in the preservation and conservation efforts of wildlife, water sources, open spaces, forests and biodiversity; in the regulation of chemical pesticides, pollution, energy consumption and even human population growth—in short, in the task of environmental justice. And that is one of the reasons why journalists write on the environment—to provide that crucial link between field workers and citizens and policy makers, to be the back up, so to speak, for the people who are out in the field and in the laboratories working for the environment. While environmental articles may not have had a big impact on direct policy making it is indisputable that they have played a big role in making people aware of environmental issues.

The prevailing attitude towards the environment is to see nature as a 'resource'. Thus, trees are not trees—they are timber or potential carbon



sinks. And wildlife sanctuaries are sanctuaries only in name since wildlife has to share the space with tourists, poachers, tribal people, etc. The predominant belief is that nature exists only for human consumption. This mindset that stems from a 'people-first' belief is possibly the greatest hurdle to any environmental movement and, consequently, a hurdle to journalists who write on the environment.

With numerous 'human issues' on the boil, till recently it was considered outrageous in India to hold a brief for the environment. While the towering morality of the 'people-first' brigade still manages to intimidate and accuse environmental writers of misogyny (an accusation that is unreasonable and hitting below the belt), there is an urgent need to speak out for the needs and rights of beings other than humans. It's not as if those who work for the environment have not been doing this but they have been forced to couch their ideas in a safe manner, in ways that will not seem offensive, fanatical or extremist. Following the cue of environmentalists, environmental writers have also soft-pedaled issues and in the cases when it is a conflict between man and nature they have usually kowtowed to the human element in the story. It's time that environmental writers stopped being apologetic and wrote hard-hitting pieces about issues that are as critical and life threatening as those that human rights activists work with. A diffident article actually undermines the cause. In fact, along with the change in confidence required by environmental journalists, it is time for the human rights brigade to also change their tone, open their minds and include the environment as a part of their battle plan.

After all, environment issues fit into the category of underprivileged, weak and helpless in exactly the same way (if not more) as the other issues that human rights activists deal with.

THE LIONS' HISTORIANS

There is an African proverb that says, 'Till the lions have their historians, tales of hunting will always glorify the hunter'. The proverb is about power, control and law making. Environmental journalists have to play the role of the 'lion's historians'. They have to put across the point of view of the environment to people who make the laws. They have to be the voice of wild India.

The present rate of human consumption is completely unsustainable. Forest, wetlands, wastelands, coastal zones, eco-fragile zones, they are

all seen as disposable for the accelerating demands of human population. But to ask for any change in human behaviour—whether it be to cut down on consumption, alter lifestyles or decrease population growth—is seen as a violation of human rights. But at some point human rights become ‘wrongs’. It’s time we changed our thinking so that there is no difference between the rights of humans and the rights of the rest of the environment. Environmental journalism has a role to play in this change. A more proactive stance and campaign style has to be adopted by environmental writers. And this will not, as feared by some, compromise the ethics of good journalism.

Consider the example of India’s vanishing wild spaces. At a time when species are close to vanishing there is a critical necessity to declare vast tracts as areas reserved solely for wildlife. It is issues like this that cry out for environmental journalism to write aggressively about and make a case for some of India’s 90 national parks and 501 sanctuaries to remain completely free of human interference whether by tribal people or for adventure sports or building resorts. In the last few decades, under various guises we have exploited and systematically destroyed our wild areas and proved that we are incapable of managing them. Only 4 per cent of the country’s landmass is now wilderness. And this too is now at risk because of The Scheduled Tribes (Recognition of Forest Rights) Bill, 2006.

To say that tribal people have a right to forestland is an idea that is out of balance with changes that have taken place in the lives and expectations of tribal people themselves. They are no longer the custodians of the forests. Because of ‘development’ they are dependent on facilities that actually have no place in forests. To give them forestland is a death knell for forests and to expect tribal people to live like their ancestors did is a death knell for them.

If they are given forestland they will have to also be provided with modern housing, schools, roads, medical facilities, etc., and if this is done, then the forest is no longer a forest. It is not a violation of their rights to say this. If any violation of tribal rights did take place then it was when they were made to ‘modernise’ and shun their own culture, lifestyle, dress, education, and medicine, and join the ‘mainstream’. If that was a mistake (and so far no one is acknowledging it was so) and giving them forestland is a way of rectifying the mistake, then it cannot be done at the expense of wildlife and forestland. One mistake cannot be rectified with another.



GOOD JOURNALISM, NOT GOOD ACTIVISM

When it comes to environmental reporting, the line between being a journalist and an activist is very fine. In fact, at times it vanishes to such an extent that there are accusations of it being environmental journalism instead of journalism about the environment. This is actually just a play on words—no one says the same about political reporters or about business reporters—and this fact exposes these sorts of illogical, loaded statements that environmental journalism has to face.

But what is true is that due to the critical nature of environmental issues, journalists sometimes find themselves having to refine the most sacrosanct of journalistic principles—objectivity. Interpreting objectivity to be the formula of ‘he said, she said’ does not do justice to the subject or to the readers. In fact, it goes against the grain of journalism which relies on the powers of observation and analysis of the journalist. There are two points to keep in mind in this regard. One is that journalism is about representing the underdog, and environmental issues definitely come in this category. The second point is that one should not be intimidated by objectivity to the extent that facts are presented with a dryness that makes them lose their natural, inherent power. This becomes safe journalism or ineffective journalism (as in the avian influenza example mentioned later). Perhaps new standards are needed for objectivity in environmental writing. And perhaps these standards will be set when the dimensions of environmental writing are expanded to include the social, the economic, the scientific, the ethical, the emotional and the spiritual.

A primary question environmental journalists need to ask in their writings is whether policy makers, the judiciary, law keepers, industrialists, citizens, etc., are serious about the protection and conservation of the environment. Judging by the increasing number of issues that are becoming critical, it would seem that we are not doing our job with the seriousness it deserves. At present we are reactive and not proactive in our battles. In the same way as the principle of objectivity needs to be refined (and not redefined) in the context of environmental journalism, so does the role of reporting. We need to go beyond reporting and anticipate stories. In this respect environment writers can go beyond being reporters in the accepted definition of the term. The environment is always evolving and whatever we do has an impact on it. To this extent environment writers have the advantage of being able to anticipate changes. In fact, this is how the climate change and global warming debates started. As it turned out, early stories on climate change were not speculative and pseudo science

even though people were contemptuous of the idea when it was initially talked about. Like any other journalist, an environmental reporter needs a healthy dose of skepticism.

Stereotypes, science, choice of vocabulary, ideas or accepted wisdom all need to fall under the scanner as seen in the following examples.

The Green Revolution came about because of agricultural research and the intensive use of water and chemical fertiliser. In its time it was relevant because it significantly increased agricultural production but it is not a replicable formula. In the mid-1990s there was loose talk of replicating this in the so-called desert region of Kutch—it was meant to be a grand plan to green the desert. First, Kutch is not a desert. It is a water scarce region. And second, the Green Revolution succeeded in the Punjab because the basics of water and fertile soil were already present—not to mention a tradition of farming—all of which are absent in Kutch. Fortunately, the plan was never implemented with the intensity with which it had been planned but the point is that even when it was being bandied about practically no questions were raised in environmental writings even though some of the ecological impact of this kind of farming are well documented.

Another example: High yield rice was introduced in India as a means to prevent famine. While it was successful in some areas it was not possible to implement it everywhere. The grain called for perfect land contouring, irrigated land, chemical fertilisers and insecticides. The outcome: only rich farmers could sow the high yield variety. The rest continued with their indigenous strains of rice. These rice varieties had evolved over generations and grew in harmony with local conditions. They were tolerant of less water and poor drainage. They were content with natural fertiliser and they had developed their own resistance to local pests. So integral were certain rice types to certain regions that diets of people in the region were accustomed to these varieties. Once the high yield rice was introduced, it had the full backing of the government. Distribution of this locally grown rice became more difficult and over a period of time small farmers were forced to convert to the new grain or to supplement their income by working for big farmers. This meant that suddenly there was an increase in the availability of labourers and this naturally meant a drop in wage levels. Thus, the introduction of something as seemingly simple (and helpful) as high yield rice resulted in social, health and environmental imbalances.

Human intolerance of nature (unless it is for consumption) is expressed through the vocabulary we use. When trees are cut on forestland and fields are planted, the term 'encroacher' is not used but when elephants



enter the same field that was once part of their territory they are termed 'rogues' and legitimately hunted. Culling is another word that is much too freely used. Its dictionary meaning is 'to remove rejected members or parts from'. When used in context of the bird flu or any other farm disease it is incorrect. Chickens, pigs, cows are slaughtered en masse without any of the selection process that correct culling would involve. Another word that doesn't say what it means is 'development'. Building more than 3,000 dams on the Narmada River and its tributaries is termed 'development' by the government even though an ancient river valley's culture and economy is being wiped out and prosperity is being replaced by destitution. The loss of the majority is seen as acceptable for some unproven gains of the minority—whether it is big dams or a railway track through a sanctuary, this is how the word development is currently used. Clearly it is antithetical to its real meaning. Likewise, 'wastelands' are terribly misunderstood. The name is taken far too literally and *carte blanche* is given to 'develop' this sort of land. Wasteland is actually just nature taking a breather. It's nature's equivalent of a farmer letting a field stand fallow so that it will recover its natural fertility. The very nomenclature—wasteland—exposes a lack of understanding of the way natural surroundings function. And finally, the word environment itself—ideally the word 'environment' should be a synonym for 'the world'—it should encompass everything within the natural world including humans, but the common use encompasses everything except humans, thereby perpetuating the prevailing idea of a divide between people and their surroundings.

While there is a serious need to use science in environmental journalism there is as strong a need to question science. Take the example of the avian influenza. While thousands of birds were being butchered, buried alive and burnt alive, there was not one report protesting the mass savagery. It's not as if people (including journalists) did not find this deeply objectionable but it was not voiced. Why? Was it the possibility of human fatalities that justified the bloodbath? But if that is so, it cannot be an acceptable answer. Just a possibility is not adequate reason to justify carnage. Was it the typical reaction to power—that at a time of crisis the government's word is law and cannot be questioned? That too cannot be accepted because the crisis was not proved (and remains so) and questions are not supposed to be taboo for journalists. The fact is that a fear psychosis operated and no one questioned the whole avian influenza scare. Is the avian influenza as deadly as it is made out to be? How many human deaths have there been that were directly linked to it? The answers



would show that as environmental writers we were panic-stricken in our reports; not by the influenza itself but the fear of being proved wrong if we asked questions. 'Safe' writing was of no help to the tortured birds, the small farmers whose farmyards were wiped out or to readers who remain confused about whether or not humans are at risk from this disease.

THE DILEMMA OF A GOOD PITCH

One of the criticisms levelled at environment stories is the tone of the writing. Over a period of time readers develop a fatigue for environmental stories because they always seem to be at high pitch. Writers think they are conveying the urgency via a high-pitched tone in the article. Readers unfortunately tune out.

The fact is that environmental issues have been neglected for so long that most situations are in a crisis. There is undoubtedly a dilemma here. But it seems to be a dilemma that writers of social issues do not seem to face. Take the example of the riots in Gujarat in 2002. Journalists wrote in shuddering detail about the atrocities. There was no objection to printing or broadcasting these details either from editors or from readers and the general feeling was that the 'truth must be exposed so that justice is done'. Yet, an environmental journalist will hesitate to describe the horrors of an animal caught in a trap or an editor will strike out a section which questions why a village mob should not be face criminal charges for bludgeoning a panther to death or a TV channel will not air footage of an elephant screaming because its calf is being taken away. Why are these atrocities not as newsworthy as the rape and murder of a pregnant woman?

At the root of environmental writing is a desire to change current thinking so that people see themselves as a part of the environment and not as masters who have a right to exploit resources. This is not a romantic ideal but a practical idea that stems from the politics of equitable distribution. In fact, such ideas have a traditional base in India. Here are a few examples. This anecdote comes from someone who works with an NGO and was researching traditional agricultural practices. During a conversation with a farmer in which they were discussing the ownership of land and produce, the farmer said something that can only be described as greatly liberal. He said that owning land did not mean he had a sole right to everything on it. Of his right over his crops, he said, '50 per cent is for me, 25 per cent is for you (that is, whoever in the community needed it) and 25 per cent is for the birds.' This belief and practice of mutual benefit



and survival stemmed from man's dependence on the natural world. His acknowledgement of it made him assimilate with, rather than try and dominate, the environment. As this dependence decreased and people learnt to control the environment, their immediate dependence decreased and their intolerance of the environment grew.

The fishing community in India also exemplifies the understanding of the delicate balance between man and his environment. For example, fishing is never carried out in the monsoon because that is the breeding season. As practicing environmentalists and fishermen know that this is the time fish stocks are being regenerated. The relationship of give and take is also expressed in small traditions like the one in which fishermen at sea always throw a bit of food into the waters before commencing their own meal.

A healthy attitude of man being in harmony with the natural world was at one time present worldwide. There was a time when the principles of law were extended fairly to all living beings—not just to humans. Medieval records have numerous instances of animal trials in which animals were fairly represented by a counsel. In one such example in 1545 in France a colony of weevils destroyed the vineyards in the village of Saint-Julien. In the ensuing trial the judge gave his sentence saying that the weevils were creatures of God and hence had the same rights as men to consume plant life. This live-and-let-live wisdom towards all beings is dying. The environment can expect no such support.

BUT PITCH, NEVERTHELESS

At a time when every thing is for sale, environmental journalism is like a call for a radical rethinking of our values, principles, priorities and political process. It's difficult especially since the environment is seen as a tradable good and as a means to exercise control and power. We are tampering with water sources like never before. In 1950 there were 5,000 big dams in the world. Fifty years later, there were almost 500,000.

Governments and big business houses talk of taming nature, of linking river systems across the country, of legalising hunting for species that go beyond certain numbers that are decided by humans. Instead of bursting at the injustice of all this, environmental reporters frequently just report these matters. Ideas like these are primitive and emanate from a primitive thought process that has to change and one of the ways to change them is to question them or to outright debunk them. At the core of environmental reporting there should be the acceptance that humans

are as much a part of ecosystem as anything else and depend on it for their survival as all others do. In the final analysis, environmental journalism is about respect for life—for all forms of life. It has to goad government, corporations and citizens to take responsibility for their actions. It has to force them, as Elmar Altvater said in his essay, to recognise that ‘the ecological costs of past growth [weigh] oppressively on future prospects; that future generations would have to pay the costs’ (*The Future of the Market: An Essay on the Regulation of Money and Nature after the Collapse of ‘Actually Existing Socialism’*, Verso, 1993).

And that is why environmental stories are the most challenging to write.

2



This Separate Category

Kunda Dixit

One of the greatest disservice we have done to the cause of environmental protection is to invent a separate category of reporting called 'environmental journalism'.

Just as 'development journalism' at one point became synonymous with sponsored reporting because it was mostly practised by lazy hacks on sponsored junkets, so it has happened with 'environmental journalism'. It ghettoised reporting on a subject that should have been linked to politics, economics and development. Somehow, 'environmental journalism' almost became another name for 'envelopmental journalism'.

Journalists should report, not fund-raise to set up organisations specialising on flavour-of-the-month issues like gender, environment, human rights, HIV, etc. These issues are important in their own right, not because some donor finds them important and is willing to cough up money to get them covered. There has to be a distance between the NGO and media worlds; getting too close hurts the credibility of both.

The way development journalism has been practised, it is as if we need to say that since we are from the Third World, it is all right that our stories are third rate. That is what happens when a cause-oriented agenda becomes more important than media professionalism.

WHEN ACTIVISM ENCROACHES ON JOURNALISM

In fact, there should be only two types of journalism in our countries: good journalism and bad journalism. Good journalism is reporting that is in-depth, contextualised, relevant, full of human interest, flows like a well-told story and is written with clear and lively language. Bad journalism is sloppy, superficial, verbose, dispassionate and dry.

The subject can be anything: a successful forest conservation campaign in Nepal, a novel and cheap way to get arsenic out of groundwater in Bangladesh, or how New Delhi has cleaned up its air. Come to think of it, just about everything is about development in our countries: the lack of development, or too much of it too fast leading to social and environmental dislocation.

Politics is about development because it is the process by which we select the most honest and efficient leader who can run the country and raise living standards. Economics is about development because without politicians creating the right environment for investment, there is no employment. And joblessness will lead to political instability which in turn will frighten away investors. Justice and equity are about development, too, because the benefits of economic growth in our region are not spread evenly. And the environment itself is about development because it is both greed and need that leads to the unsustainable exploitation of natural resources.

WHICH PAGE? ONE OR THREE?

Development should therefore be page one news, not an afterthought feature for the inside section. Development should not be a separate category of news, but integrated into all political, economic, business coverage. And since environment and development are two sides of the same tree trunk, coverage of pollution, conservation, wildlife, energy policy, habitat, should all be interlinked and covered in a wider context, and not just in isolation. Six in every ten people living in South Asian countries today are desperately poor, yet television news is preoccupied with cricket. Half the children go to bed hungry every night, but the covers of our newsmagazines are about weight loss parlours. Maternal mortality in many parts of the subcontinent is nearly at Sub-Saharan levels, but we are obsessed with polls on middle class sexual mores. Hundreds of cotton farmers commit suicide every year because of indebtedness, but the media is focused on growth. Reading the region's newspapers, you would be hard-pressed to find coverage of these slow emergencies.

The trouble begins with what we define as news. For anything to make it to the TV news in South Asia these days, rich people have to die suddenly, spectacularly and with dramatic visuals. So, even if thousands of children perish from diarrhoeal dehydration every day, it is not news because they are poor and they die silently, separately, and scattered in homes across the country.



The real reason for the deficient coverage of environmental and development issues in our media is not government control, but the filter of over-commercialism and the concentration of media ownership that is leading to what John Pilger calls 'the censorship by exclusion'. There have been instances of advertisers yanking out ads because they don't want it next to a story about maternal mortality. Advertisers want upbeat coverage, and they see nothing wrong with dictating content that gloss over the problems of society. The biggest lesson from our failed past coverage is that journalists haven't been taught about the linkages between politics, society, traditions and culture, business and trade with development. We write about development and the environment as if they exist in a separate world, and we report in a sterile aloof style of the wire-services. The tone is as if we consider it beneath ourselves to be reporting on something so boring. Reading some of the coverage of vital irrigation projects or a new conservation initiative, you get the feeling the reporter takes it as a punishment and would rather be covering the prime minister's press conference.

Where is our sense of outrage about the wrongs in society, or our admiration for those who have survived and done well despite all odds. Why doesn't it make us angry, as journalists and citizens of our countries, about the injustices that lie at the roots of our problems? Why do we underestimate the power of the good example. Without indignation, a reporter can't muster the passion needed to cover the political and economic roots of environmental and development stories. And when we do write them, we won't be able to do it with commitment and attachment.

A FINE BALANCE

How to practise this kind of journalism without sounding like a propaganda pamphlet? It is a fine balance, and many of us lose it while on assignment. Either the injustice is so blatant and we are so angry that we lose all sense of proportion and become flag-waving revolutionaries, or we are so detached that our stories sound bland and distanced. Getting the tone right, letting the people speak, injecting the colours, textures, sounds into the story through lively eye-witness reporting comes with training and experience. But it starts with a sense of personal commitment on the part of reporters to try to make things better.

When Inter Press Service published my book *Dateline Earth: Journalism As If the Planet Mattered* in 1996, I had written about this sense of personal mission that all journalists need in their kits. I had argued that journalists should

worry less about objectivity and strive for fairness. They should learn to become engaged and be experts in development or environmental issues so they can report with authority and confidence. Many, including some of my peers in journalism education, told me I had gone too far, I had crossed the line dividing activism and journalism. I admit, the book is a bit strident and polemical, but I was young then. I still believe, however, that there is a way to do both: engage in caring, point-of-view journalism while retaining our professional credibility.

FACT OF THE MATTER

Of course, reporters need a code of ethics. Universal media values can't be compromised however much we are moved to correct a prevailing wrong through journalism. Some of these are:

- You have to get the facts right. Double, triple check even the trivial facts. You can't bend the truth 'a little' because it helps the cause.
- Being fair is to listen to all sides, even the crooks. You can't go into a story with your mind all made up. Not everything is what it may seem.
- At least politicians are elected; journalists are not elected. This requires reporters to have even more integrity and accountability than politicians.
- Responsibility sounds like a cliché, but we shouldn't be in the business of covering unpalatable truths because they don't fit with the story.
- Personal commitment: What is my inspiration? Is there a purpose to my work? What am I trying to change?
- Absolute neutrality may not be possible, but we must be independent. And separate news and views.
- Much of it is just letting our conscience be our guide.

DEMOCRACY AND DEVELOPMENT

After many years of teaching and theorising about the required 'paradigm shift' in reporting and in media education, I returned to Nepal in 1996. It was soon clear that this 'new journalism' is easier said than done. There are competing pressures from the market, from the advertising and sales departments; most young reporters join a paper or a TV station for the



glamour and want instant fame. There is little understanding of the public service role of media and that selling a newspaper is different from selling a shampoo.

And for a country in the throes of violent conflict, war coverage and politics dominated the news. Development and the environment were put on the back burner. And we covered the war like it was a series of battles, counting the bodies for our dispatches. We forgot that in modern wars, it is the non-combatants who suffer the most.

All in one family.

But one lesson we did learn from Nepal's messy democratic transition of the 1990s was that development and environmental protection is only possible through grassroots democracy. We tried dictatorship, we tried revolution, but it is only through pluralism and devolved decision-making that you can raise living standards.

This will work only if the people are allowed a say and made to participate in decision-making. And you can only get people to participate through communication. Not the vertical communications of the national media industry, but the horizontal communications of community media at the grassroots.

COMMUNITY MEDIA

Today, after a cathartic war and failed dictatorship, we are convinced that development and environmental protection can only be ensured by decentralised decision-making to elected local councils. And in this communications is vital. It is there that Nepal's experience with community radio is a success story. Citizens need to be aware about local issues if they are to have a say in the decisions that affect their daily lives. Press freedom is an important part of this process, but in a country where literacy rates are low, radio is the most important medium of communication.

Starting from the deregulation of the airwaves in 1997, there are now nearly 200 FM stations throughout Nepal. Many of them are run by village councils, local communities and cooperatives. They prove how vital communication is to local decision-making about sharing of forests, water, and other basic necessities.

It is not a coincidence that whatever has worked in Nepal since the return of democracy in 1990, has the word 'community' in it: community radio, community forests, community-managed schools and hospitals. National media is either government controlled or commercialised, but community radio reaches people with information that matters to their

daily lives. The handover of forests to local user groups in the past two decades has increased forest cover across the Himalayan mid-hills by more than 20 per cent. While government schools have poor quality and private schools are too expensive, the transfer of schools to local management committees has transformed education wherever it has been instituted.

Better quality schools teach children about environmental issues, about the need to protect forests near water sources. Community forest user groups stall feed livestock so they don't destroy the undergrowth, and have a scheme for rotational grazing. Once a week, villagers are allowed to enter the forests to collect deadwood and thatch. The awareness needed to get the public's participation, priming villagers with this basic conservation information is all made easier because of community radio.

Village FM radios give a voice to the people, provide much-needed information on local issues and foster public debate. Radio stations have helped strengthen democracy and forced local politicians to be more accountable in delivering basic services like health and education to the public.

GREEN GRASS, GREENER PASTURES

The scenic valley of Palung located 45 km west of Nepal's capital of Kathmandu with its dense forests and spectacular views of the Himalayan mountains is popular with tourists.

In the past 10 years, after tourism collapsed because of the insurgency, Palung's economy has been transformed by a successful grassroots cooperative that supports vegetable farming. Cauliflowers, cabbages and potatoes from Palung valley today feed Kathmandu and are even exported to India.

The Palung Multi-purpose Cooperative has been an important part of the local economy. It gives small loans to women farmers from their own savings so they can buy seeds and support themselves. The women now have extra income which they use to send their children to better schools, invest in dairy buffaloes and other income-generating activities. Female literacy is on the rise, and this has had a direct impact on the reduction in child marriages and infant and maternal mortality. The forested mountain sides are all managed by local communities in which women have a big say on fodder and firewood collection.

It wasn't always like this. I remember passing through Palung as a boy 35 years ago. The view of the Himalaya was stupendous, but the hillsides were barren and brown. Most of Palung's young men had migrated to the



cities. It is difficult to believe this is the same place. Today, the men are back and all busy working in their cabbage patches. Serrated ridges of pine frame the mountains and new tourist resorts have sprung up, offering treks. The forest cover has revived springs and streams that had gone dry and there are fewer landslides.

Four years ago, the Palung cooperative started its own FM station, making its programmes on farming, micro-credit, fertiliser and vegetable prices a vital part of the community. Farmers are now informed about market prices of their vegetables and are less likely to be cheated by middlemen. Rising income of the villagers means less pressure on the forests and better protection of the slopes.

Palung FM broadcasts interviews with villagers allowing them to speak out about their problems and share experiences. It has educational programmes for children on environmental protection and personal hygiene and health bulletins in four languages. The radio also keeps people informed about political developments in the capital and they are now vocal about their rights. The radio has helped the cooperative to organise self-help groups where women put Rs 50 into a kitty at their monthly meetings and members can get loans. There is almost 100 per cent repayment. Palung FM's reporters are there at the meetings, interviewing women who have borrowed money and these are broadcast in the evening.

One new worry for farmers in Palung is a disease that has devastated their crops in the past 3 years. The cooperative is worried because farmer incomes have dropped and there is a danger of farmers defaulting on their loans. The radio is used to broadcast information about the infection, crop diversification and antidotes to the virus. The experiences of farmers who have rotated crops to reduce the impact of the disease are also broadcast.

Palung FM's most popular broadcast is the 15-minute daily morning programme listing vegetable prices from the main wholesale markets in the city. Every morning the station's reporter broadcasts live, via telephone from the central vegetable market in Kathmandu, the selling prices for various vegetables. Farmers now know where prices are better and can bargain with traders.

The radio doesn't just make people more aware, it helps increase income, and sometimes the information broadcast also helps save lives. Sunita Syangtan, a 19-year-old college student, is interning with the radio and broadcasts a daily programme in the local Tamang language that tackles a whole range of issues from forest conservation to alcoholism and gambling among the men in the community.

Every winter, many Tamang children die due to pneumonia because of the cold and from breathing smoke from the kitchen fire. Palung FM used to broadcast public service announcement in Nepali language but it hadn't made a dent on child mortality. But after Sunita started talking directly to Tamang mothers in their own language about pneumonia, the child mortality rate has come down dramatically. No one had earlier figured that the mothers who shouldered the responsibility of caring for their children didn't speak any Nepali.

Perhaps the most important function of radio in Palung has been to spread awareness among farmers, especially women, in remote villages. For the first time, women know they can shape their own destiny. In Palung and elsewhere in remote parts of Nepal, community radios are empowering citizens. They are cementing community bonds, protecting the environment and helping people improve their lives. Palung's hard-working farmers would probably have been able to prosper anyway. The valley's forests would probably have regenerated over time and its literacy rates would have gone up. But their community radio has made that journey much shorter.

3



Environmental Journalism at the Time of Economic Liberalisation

Richard Mahapatra

In India environmental journalism means global reportage with village datelines. Environmental journalism is no more the old 'off-stream' but a 'main-stream' deliberation on contemporary existence. Particularly so when India has the unique distinction of being one of the fastest wealth-creating nations, having the largest number of poor in the world. Poverty in India is primarily environment-driven. Thus environment journalism, overtly or covertly, is about the most mainstream issue, poverty. Every story written from a village on environment has intense global linkages. And every global environmental story written has a few meanings for an Indian village.

MOHUA AS A METAPHOR

Exactly 10 years ago in 1998, Sumani Jogdi, a tribal woman of Orissa's Koraput district, set the agenda, and intellectual challenges, for environmental journalists in India. Sumani has been spearheading a campaign against bauxite mining in her village. Her stake in the campaign: she has to vacate her home and would stop earning around Rs. 10,000 a year from collecting mohua flowers in the nearby forest. The Rs. 5,000 to 10,000 crore investments that the district is attracting for mining bauxite were beyond her comprehension. More than that she could never imagine how steel would mould her a prosperous life. 'If you want to do development works for people like me, get me access to more forests. I will collect more mohua flowers and earn more. A steel industry will just displace me, take away my forests and will give back few days of daily wage jobs. That is not development for me,' she told this author in 1998.



In the last 10 years, her small campaign has evolved into a big and iconic struggle against mining in Orissa. In the meantime, India has opened up the mining sector and Orissa with vast mineral resources is solely depending on steel plants for economic boom. It is triggered by the rising global demand for steel. Global mineral price is rising and companies are in a rush to explore new sources. The cheapest source makes the maximum profit. Orissa is the right place for the global mineral industry to thrive. The state government's insistent reason behind this policy is to raise her more than 50 per cent people, like Sumani, above the poverty line. Orissa is the poorest state in the country but with impressive business investments.

Sumani's economic model for rural development—based on local ecology and its sensible uses—is in sharp contrast to contemporary political thinking that believes that bringing in investments in private sector would ultimately bring in prosperity for the poor.

For environmental journalism, this conflict of interests, of perspectives and of modes of development is the greatest challenge. How does an environmental journalist strike a balance between the two streams of thought? Being an environment journalist means a certain degree of biases towards environment. You tend to see or assess situations through the eye of environment. Current industrialisation process, as in Koraput and in case of Sumani, inevitably means great compromises on environment. So does it mean an environment journalist has to shed the principle of objectivity? Or how much bias is an environment journalist entitled to?

IN BETWEEN STREAMS

A contemporary environment journalist is often faced with this challenge. The challenge is more daunting as economic liberalisation is the accepted mode of delivering economic goods. From the prime minister to public relation officers of corporate houses, environment reporters are the most debated species.

Policy makers often term environment journalists as 'people practising socialism as time pass'. Industries see them as 'less progressive'. Even inside national media houses, environment as a subject of reportage is reserved for 'old school students'. An environment reporter occasionally celebrates his or her existence in case of an extraordinary environmental event. The rest of the time they just remain in the margin, waiting for the next big event.



Environmental journalism is not new to the Indian media. Since early 1970s, the media has been taking interest in the environment, even though in a very staccato manner. But with economic liberalisation since 1991, the role of an environment journalist has drastically changed. Or rather, economic liberalisation has made his role more challenging.

AND INTO THE MAINSTREAM

Economic liberalisation has triggered economic boom and has caught the public imagination. Suddenly growth has become the buzzword. India finds it finally refreshing to do away with her 'Hindu growth rate' tag. As the public acceptance of the new economic model deepens, environment as a public good is losing relevance. This means environment and its related problems like poverty in rural areas is getting less and less favour within the public sphere. This also makes the job of an environment journalist difficult—you have to fight hard against a popular perception to be able to bring back environment into mainstream.

The late Anil Agrawal, a noted environmentalist and founder of the environment magazine *Down To Earth* used to say: 'Economic liberalisation has become a perfect excuse for government to cover up environmental problems. Because the powerful middle class is beneficiary of the boom and has been trying hard to push aside environmental concerns as stumbling blocks.' Even though, as various estimates suggest, the gross domestic produce has doubled in the last one decade, the load of pollution has more than tripled. But this has not made many impacts on public perceptions.

Take for example the Bus Rapid Transit (BRT) system in Delhi. The BRT makes provision for segregated roads for different types of vehicles and is being implemented in Delhi for fighting road congestion. The project is attracting criticism from mostly car owners. They say that the project leaves little space for cars and give more space to buses. Government and environmentalists are pushing the project saying buses transport more people and thus bring down per capita pollution emission. Cars, though large in number, transport much less people and also occupy more road space. Ultimately cars pollute more too. Delhi, after years of campaign by environmentalists through the Supreme Court, shifted its public transport system to compressed natural gas (CNG) fuel, thus bringing down pollution levels. But the rise in the number of cars, a sign of the booming economy, has undone the gain in clean air. So it is prudent for environmentalists to push for the public transport that runs on clean fuel as well as to make the public transport attractive to general public for discouraging private

cars. 'Even in editorial meetings our editors are against giving priority to buses over cars. So our reportage is mostly focused on the short-term problems like accidents while the BRT is being constructed,' says a senior correspondent working for a national daily. It is observed that the media coverage of the BRT is dominantly biased against it. This results in the media, particularly those covering Delhi's environment, focusing less on the logic behind the project and writing more on problems related to its construction. There are already talks that the Delhi government may not take similar projects in future.

ECONOMIC LIBERALISATION, ENVIRONMENT AND ENVIRONMENTAL JOURNALISM

Rich Man, Poor Man

In 2007 India's National Sample Survey Organisation (NSSO) came out with its consumption expenditure trends that form the basis for estimating poverty in India. The estimate was eagerly awaited as it standardised its methodology to measure consumption expenditure. This could enable one to compare the level of poverty before and after economic liberalisation, thus judging the impacts of economic growth on poverty reduction. In the last three decades the number of poor in India remained the same. Everybody was desperate for the new estimate to see what positive impacts the new economic growth model must have made.

The results were disappointing: poverty reduced faster in pre-1991 period than in post-1991 period. It has become chronic in traditionally poor areas like in Orissa. The gap between rich and poor has further widened. And more interestingly, despite gruelling poverty, the rural population was spending more on food consumption.

How did the media report such an important event? To sum up the media coverage, it just passed this on as other government declared figures and almost all newspapers reported the government claim of poverty-reduction without any critical scrutiny. The biggest failure was from the environment journalists. The survey had more environmental meaning than economic.

When one plots the survey findings into the map of India, it emerges very clearly that India's poorest regions are also the richest in the availability of natural resources. Most of the poor in these areas are dependent on natural resources for survival. To take it further, why didn't



economic growth impact these areas? The poorest areas are also attracting huge business investments driven by the economic growth. To probe further, there are 125 people movements against land acquisitions in the poorest areas. And to close the cycle, most of these areas are in the tight grip of extreme leftist insurgency, popularly known as Naxalism. In fact a great environmental story was just killed. With this, the government again escaped after committing a blunder which otherwise would have called its bluff on economic liberalisation and its benefits. Alert environmental journalism would have explained to the government the environmental meaning of conflicts like Naxalism.

This brings Sumani Jogdi into discussion again. In November 2007 the author met her. Why is she poor consistently? The NSSO estimate was for her to explain. 'You report on my poverty but never ask the reason for it,' she replied. 'The closer the forest to me, the richer I am,' she explained. An analysis of India's poor would show that out of the 301 million poor in India, 100 million depend on forests for survival and the rest depend on agriculture. But forests and agriculture are hardly targeted for economic well-being. Rather these resources are being given away to the agents of new economy: the industries. 'People like me would remain poor till the time government looks away from our source of livelihood, that is, forest and lands,' says Sumani. Recently the state chief minister termed groups opposed to mining in the district as 'anti-development'. The series of protests against land acquisition are inspiring people in other districts to oppose industrialisation. Many foreign investors in the state are threatening the government to withdraw.

Village as Global Beat

In a globalised economic context an environment journalist plays a crucial role. First, India is an economy that is fast rising and has started having influence at the global level. India's decision to import food raises alarms in the global market: it may lead to foodgrain price rise. If India decides to control its mineral sector, the global metal market will come to a crisis level. Developed economies consider India as a successful model of new economy. Secondly, India also hosts the largest number of poor of the world. In other human development indices like access to clean drinking water, water related diseases and overall level of nutrition, India performs worse than Sub-Saharan Africa. So to meet the global millennium development goals (MDGs), India's performance in poverty reduction and in other human development counts decides how the world is going



to meet the MDGs. On the other hand, most of India's poor depend on ecology for survival. Ecological degradation is the biggest factor triggering poverty for rural Indians. So the linkage between environment and poverty is crucial in Indian context. And in the global context, India's poverty reduction is vital for overall poverty reduction.

Thus an environment journalist in a liberalised economy does global reporting but with village datelines. When one reports about the anti-bauxite mining protest in Orissa, there are visible reactions in London Metal Exchange. When one reports about rising rates of groundnut farmers' suicides in Andhra Pradesh, Malaysia and other South East Asian countries take note of it and on its probable impacts on their palm oil export to India. Or when you report that poverty in India has reduced at a slower rate during liberalisation, the World Bank and the Asian Development Bank come out with reassuring notes on economic growth and poverty reduction linkages. So a village dateline with global perspective calls for better understanding of environmental issues.

THE DAILY RACK

Off late there has been a surge in specialised magazines and media on development issues. Whether it is *Down To Earth* (the oldest of the development media) or the *Civil Society* or the digest type *Grassroots* magazine, there are visible reportage on issues concerning rural as well as urban population vis-a-vis environment. Few national English dailies are also showing symptoms of giving more weightage to development reporting. But the tone and tenure of reportage in India is rather passive and doesn't point at a deep understanding of environmental issues. It seems that the media coverage to development issues stems from a policy of editorial charity instead of an understanding of the genuine relevance of such stories to the overall economy, rather to the global economy, as explained above.

Unlike say in 1980s, now development journalists don't have to struggle hard for information. There is fast flow of information on environmental issues, mostly due to the vibrant civil society groups and advocacy and campaign activists. The recent Right to Information Act has further made information accessible. But there is a lack of imagination to use the information to build public opinion on environmental issues. So the result is that environmental issues get media space but people hardly find them in the right context to make informed choices or responses.



Look at the media coverage of the National Rural Employment Guarantee Act (NREGA). The NREGA is India's first employment guarantee Act that ensures 100 days of unskilled jobs if a rural citizen demands it. But the core of the Act is creation of village infrastructure like irrigation facilities and water harvesting structures using this guaranteed employment. In more than one way, the NREGA is an ecological regeneration programme. It has just used the guise of public wage provision to do so. The NREGA has come at the right time when India is facing foodgrain production crisis. The Act is aimed at augmenting agriculture in dryland areas of India, which accounts for 40 per cent of foodgrain production in the country. The Act, thus, is to ensure food security at the national level. At the global level, this Act has the potential to stabilise the foodgrain price through raised foodgrain production in India.

The development media, to be fair to them, has been proactively reporting on the Act's implementation. Everyday, as this author's own analysis of six daily newspapers over a period of one month reveals, NREGA has been in news. There is regular interface between the Union Rural Development Minister and media persons on the status of implementation of the Act.

But if one analyses the contents of media coverage on NREGA, the real story emerges. Rather such an analysis brings out the inherent lack of understanding of environment journalists on key government programmes and their indelible links to the environment. Most of the media coverage judges the programme's implementation on the basis of the employment demanded and given. This is the typical government way of measuring the programme's success. In fact, for the last two years, the government has been claiming 90 per cent success rate in the implementation of NREGA's using this parameter. Environment reporters have just bought this argument conveniently.

There is hardly any coverage on the prime objective of the Act: creation of village assets. The Act had already created more than a million village assets till December 2007, most of them water harvesting structures. Has any media report appeared on these structures and their impacts on local economy? An absolute no!

This is where the challenge of using information with imagination for effective environmental journalism comes into play. All data on the implementation of NREGA are in public domain. An environment reporter with basic understanding of the NREGA's objectives would have checked out the village assets creation data instead of the employment creation data. Being implemented in the poorest districts of the country,



this should have been the natural question to ask: has the Act made impact on local development? By not doing so, environment journalists have yet again given the government an opportunity to bunk public good.

So to conclude a session of observations on India's environment journalism, environment journalists have been lacking an understanding of the 'environment' in the Indian context. While mere reportage does the basic job of information dissemination, journalists have not been able to put the right context to an event. Here environmental journalists have failed to make an impact. Already being a minority within the huge media sector, such lapses have critical impacts on India's environment.

4



Environmental Journalism since Economic Liberalisation

S. Gopikrishna Warrier

In 2002, I was working as a correspondent specialising in reporting on environment, agriculture and development in the Chennai news bureau of *The Hindu Business Line* newspaper. I got a call from senior journalist and the President of the Forum of Environment Journalists of India (FEJI), Darryl D'Monte, who asked me if I could help organise a media workshop on water and sanitation at the M.S. Swaminathan Research Foundation (MSSRF). Darryl had already requested the partnership of Prof. M.S. Swaminathan for the workshop, and there was sponsorship for the workshop from the World Bank's India office. I was keen to prove that my involvement with FEJI was not a sleeping membership, and worked in partnership with MSSRF and Darryl to organise the meeting.

The participants at the workshop were mostly known suspects—journalists who had consistently reported good quality stories on environment and development. Some were young, but most had cut their teeth with regular reporting in their younger days and had specialised in their area with passion for the past decade or so. In simpler words, most of us were in our middling years and had continued to do what we did since we liked it, and had at times faced career hiccups due to our choice.

In January 2003, I left *Business Line* to take up the assignment of Media Officer at the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad. I was off active journalism and had taken the challenge of developing and systematising media relations for the only international agricultural research institute that was member of the Consultative Group on International Agricultural Research (CGIAR) and is headquartered in India. Darryl called again, and asked if ICRISAT will be willing to host a media workshop on water and sanitation. The World Bank India office had committed sponsorship.

The three-day workshop was held in July 2003. Most of the participants were those who had attended the Chennai workshop the previous year. However, when the session for introductions started, something interesting emerged. Between 20 to 30 per cent of us (including yours truly) had quit active environmental journalism in the previous year.

Why did this happen? This chapter is an attempt to find an answer, and thereby also look at how environmental journalism had fared in the decade following economic liberalisation, the great transition point in contemporary Indian history.

The media is also an inextricable part of the society, so any changes that happen in the society have their impact on journalists too. How environmental journalism fared as a profession has a relation to how the society and media treated environmental issues and discussions during the first decade of economic liberalisation.

ENVIRONMENTALISM CHANGES SHAPE AND COLOUR

The year: 1991. A hoarding at a South Delhi intersection stated it succinctly. The artist had caricatured a moaning Sonia Gandhi uttering, 'No.' Facing away from Sonia, a pouting Narasimha Rao said, 'Thank you.'

A suicide bomber had killed Rajiv Gandhi, former prime minister, who was regaining his sheen during the 1991 general election campaign. Sonia had refused the requests by members of the Congress party to stand as a candidate for the prime minister position. Rajiv's death and Sonia's refusal had resurrected Rao, phoenix-like, from the brink of political retirement. And Rao's tenure as prime minister, between 1991 and 1996, saw a paradigm shift in India's economic policy.

It is a moot question whether India would have gone through the process of economic liberalisation, privatisation and globalisation if Rao had not become prime minister. Perhaps anybody else in his position, given the foreign exchange bankruptcy of the country at that time, would have taken the same path.

This chapter tries to look at what happened in the history of Indian environment movement, and thereby to environmental journalism, in the first decade since the momentous decision taken by the Rao government. My perspective is that of a journalist, having reported and analysed many of the developments on the environment front during the decade. A journalist is a historian on the run; reporting as he runs, and analysing as he waits to catch his breath.



Environmentalism and environmental journalism in a country are parts of the larger political and social fabric. Politically, the period of one-party domination was over and the period of coalitions had begun. Whether it was the Narasimha Rao government from 1991 to 1996, the 13-day BJP wonder, the two United Front governments, the two BJP governments, or the Manmohan Singh government, it was a patch-up of political parties that ran the country. This meant that federalism and strong regional interests dominated the political scene since 1991. Strong demands on regional development had its impact on environment decisions and environmentalism.

Indira Gandhi as prime minister could decide that the hydro power plant in Silent Valley should not come, and also that development activities in the coast should be regulated. No prime minister since 1991 could have taken such a decision, if faced with pulls from a regional leader such as Chandrababu Naidu or M. Karunanidhi.

The economic liberalisation also created a pressure group hitherto nonexistent in the Indian society—the middle class consumers. Till the liberalisation process began, the middle class was the most neglected section of the society. While the rich and powerful knew how to get what they wanted, the poor constituted vote banks, which no politician could ignore. The globalised, privatised and liberalised markets needed consumers, and where could they come from? The 250 to 300 million-strong middle class in India was larger than the population of the USA, or that of the Western European countries put together.

The middle class consumer became the king. With cheap internet and mobile connections the world was in the hands of these consumers. Houses and cars, which were lifetime investments for their parents, were easily available for this young generation. Cheaper airfares made reaching any part of the country possible in hours. Participation in the stock markets gave them a sense of ownership of the private sector.

With the tertiary sector of the economy—information technology, entertainment, banking and the financial services—growing, there was increased migration of job seekers to the urban centres. The middle-class urbanite finally got his voice. And he used it too.

When the economy focused on the middle-class urbanite, environmentalism too moved into his hands. Environmentalism became more Western in nature. The classical Indian environmentalism has differed from Western environmentalism in the sense that in India environmental movements have emerged as common man's fight for access to natural resources, be it the Chipko, anti-Tehri or anti-Narmada movements. In

the West, environmental movements have evolved as the urban middle class taking up issues—in the US after the Vietnam War, in Germany as anti-nuclear protests.

Indian environmental movements were more direct, pitting the moral authority of a person or community against an established power—say a Sunderlal Bahuguna fasting against the Tehri Dam, or the villagers of Sirsi, Karnataka, hugging trees to prevent them from being felled by contractors. The Western movements were less direct action and more action using technical, legal and media campaigns. Interestingly, Indian movements never evolved into political parties, whereas the Green Party in Germany, Sweden and Finland had their roots in environmental movements.

The classical Indian environmental story had its stock characters—the individual or the community facing an environmental problem pitted against the government and the industry. This character set became fuzzy with economic liberalisation. First, the government became the facilitator for the industry, rather than a licensing authority. Also, the middle-class urbanite did not share the same antipathy towards either the government or the industry as the slogan-shouting, fasting members of the environment movements, say the anti-Tehri or the anti-Narmada movement.

Only once in the 1990s did the middle-class urbanite empathise with the people of the classical environmental movement. It was when writer-activist Arundhati Roy led a group of people from Delhi and a few other urban centres, Pied-Piper like, to the Narmada Valley in support of the environmental movement being led by Medha Patkar.

Environmentalism was taking on a new language, a language hitherto unseen in the Indian context. It was the language of green diplomacy and of a growing environmental industry with job opportunities.

Internationally, the conference of parties signatories to UN Climate Change Convention organised at Kyoto, Japan, in December 1997, made greenhouse gas emission as an internationally tradable commodity. The developed countries started looking at developing countries for partnerships under the Clean Development Mechanism (CDM).

This generated a new school of diplomacy—green diplomacy. When US President William Clinton visited India in March 2000, he promoted green diplomacy with gusto. Speaking under the shadow of the Taj Mahal, he committed more than US\$ 200 million financial support for bilateral projects on environment and clean energy. The underlying motive: to participate in the Indian market for environmental goods and services, and lay the foundation for emission trading through CDM. Though his successor George Bush walked out of the Kyoto Protocol, his alternate



strategy also had scope for collaborating with developing countries on emission trading.

Environment was growing as an industry. In the late 1990s the Confederation of Indian Industry (CII) estimated that the market for environmental goods and services in India was worth US\$ 3 billion with a scope for 10 per cent annual growth. The green industry, with ample employment opportunities, was opening up through the designing and construction of pollution abatement structures, energy and environment audits, water treatment and supply systems, environment law and environmental communication.

The middle-class urbanite was talking about environment. He had taken over the environmental discussion from the communities in the Narmada and Tehri valleys. When the middle-class urbanite had taken over environmentalism in the country, the tools that he used for environmentalism also changed. From the classic situation of taking a moral position, it moved to fighting legal cases, media campaigns, lobbying with parliamentarians, policy advocacy and warfare through e-mail and the Internet.

In and around 1996, environmentalism found a great friend in an active judiciary. The combination of an activist lawyer (M.C. Mehta) and a 'green' judge (Kuldip Singh) in the Supreme Court resulted in many judgements on environment. The shrimp aquaculture industry within the coastal regulation zone was asked to slow down and the leather industry was asked to clean up or pack up. The tanners were also told to pay for the damages, meticulously calculated by an authority established on the orders of the Court. There were also judgements on developments along the coast, for instance the Goshree project in Kochi.

The Centre for Science and Environment (CSE) took one of its campaigns through the media, which included its own publication *Down to Earth*. In early 2003, CSE alleged that bottled drinking water contained pesticides. Later the same year, CSE stated that Pepsi and Coke contained pesticide residues 36 times more than the European Union standards.

Citizen's groups had their hand at policy advocacy. They worked on the drafts of the Biodiversity Legislation, Plant Varieties Protection and Farmers' Rights Act, amendments to the Wildlife Protection Act, Rehabilitation Policy and Law, Coastal Regulation Zone Notification and the Panchayat Act.

Something rather unique happened in March 1997. The Rajya Sabha had passed the Aquaculture Authority Bill (AAB) through a voice vote. The AAB was designed to counter and nullify the Supreme Court judgement

on shrimp aquaculture by permitting, with retrospective effect, industrial aquaculture within the coastal regulation zone. Enraged, green groups lobbied effectively with sympathetic parliamentarians to prevent its passage in the Lok Sabha. The conversion of Indian environment movement to one dominated by the urban middle class was complete.

In this milieu emerged the global environmental campaign group, Greenpeace, in India. Making a low-profile entry in 1996, the young campaigners of Greenpeace brought to India the campaigns they were promoting globally—against dioxins and furans, against genetically modified organisms, etc. They used the multiplier effect of the media to strengthen their campaigns. Indian environmentalism was now global.

Even while this process was going on, environmentalism took strong pro- and anti- positions. 'Are you with us or against us?' they asked. Say no to GMOs, say no to private power plants, say no to waste incineration, say no to industrial aquaculture, ran the campaigns. With these strong positions, the environment movements lost the space for discussions and the space for initiating change. And where change did happen it was more through force, for instance the Supreme Court ordering public transport vehicles to change over to compressed natural gas as fuel in Delhi.

Since environmental activists did not use the space for discussions, there was a marginalisation of environmental discussions in the national consciousness. What was lost in the process was the space for legitimate dissent, an absolute necessity for any democratic society.

IMPACT ON ENVIRONMENTAL JOURNALISM

The marginalisation and loss of space for environmental discussions in the national consciousness had its impact on environmental journalists. They too felt the squeeze for space to express themselves in their publications and TV and radio channels, a decade after the economic liberalisation process had started. 'No, not another environment story,' is usually the refrain that many environment journalists heard.

The environmental journalists were hit in the face by the same changes that had affected environmentalism. Most of the journalists in their middling years—like this writer—were those who had grown hearing and reading about environmental debates such as the one that surrounded the Silent Valley Dam. That was the time when the modern Indian environmental movement was growing. Earlier, there were stories on Chipko movement.



Later, when these men and women became journalists, they covered and wrote about the full-fledged anti-Narmada and anti-Tehri movements. When the anti-Narmada movement marched from Rajghat in Madhya Pradesh to Ferkuva on Gujarat border in December 1990, many of these journalists were at the site, reporting for their newspapers and magazine. Many also visited and interviewed Sunderlal Bahuguna when he was fasting on the banks of the Bhagirathi river protesting against the Tehri Dam.

Baptised into the world of classical environmental controversies, many of these journalists failed to see the space closing. However, there were some who saw the changes coming and had started reporting on the emerging environmental issues such as the green markets and green diplomacy. Unfortunately they were unable to convince their seniors of the growing significance of these areas. Editors and managements considered anything green as peripheral to journalism. And many environmental journalists moved away from actively reporting the subject.

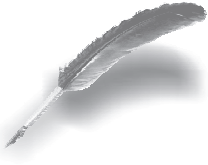
This had its impact, which is being felt even today in publications and electronic media. When the Conference of Parties to the climate change negotiations met at Bali in December 2007, there was hardly any insightful reporting on the event. This was despite the fact that there is much at stake for India in these negotiations.

Reporting the environment is a serious business, and journalists can move into the nuances of the climate change negotiations or the Cartagena Protocol only if he or she has the time and resources to follow these negotiations carefully. Only this can ensure that when the time comes for covering an important meeting—say the one at Bali—the journalist has in-depth understanding on the subject.

The same holds true when reporting a subject such as the one surrounding genetically modified crops (GMCs). While any journalist covering the subject will be flooded by material from supporters and opposers of GMCs, to go beyond the 'for' and 'against' stories, the journalist needs to understand more about the technology, its risks and strengths.

For mature and good quality environmental journalism to grow and bloom, perhaps journalists need to re-package themselves and find space for writing on environmental issues, green industry and green diplomacy within the framework of the emerging media landscape. This one-sided action will not have an impact, unless there is investment by editors and managements on time and resources for the journalists. This is the challenge and this is the hope.

5



The Most Serious News

Sunita Narain

(30 April 2005)

FROM WEST TO EAST

Each time I visit the US I am struck by the lack of serious news on its many television channels and newspapers. The media here clearly follows the dictum 'if it bleeds it leads'. In other words, news is not about informing or educating people, but simply entertaining them. This state of affairs, I have realised, is neither accidental nor incidental. It is deliberate; indeed, inevitable.

Inevitable, because it is a function of the business model the country has adopted for its media, much like the rest of its public works. It has deregulated the media completely; in other words, there are no public duty functions of the media the government can or must support. Free from the 'clutches' of the state, over the years, the rules of the market have prevailed in the media. The weak are weeded out and the mighty become mightier. In 1983, 50 corporations comprised the US media; by 2004, five. In other words, the world's oldest democracy, and one that promotes democracy as a religion across the globe, is informed and educated by five corporations that owe their allegiance to the profits of their shareholders.

For profit and pay, corporations slash funding for hard-core news functions. The Pew Research Centre, a Washington DC-based think tank, has found that between 1994 and 2001, radio stations lost 57 per cent of their news staff, while network news correspondents declined by more than a third since the 1980s. This led directly to declining quality in news reporting, translating into a serious credibility crisis with readers. Pew found that even in the 1990s only 55 per cent of people surveyed said the media mostly got its stories right. But by 2004, only 36 per cent believed



so. Most people in the US believe their media cannot be trusted. So, it is not surprising that Pew found that over 35 per cent to 45 per cent of the people they surveyed categorically said that they believe nothing they see or hear in print or on television.

The crisis goes deeper than just erosion of trust. The fact that people do not believe the media means fewer people tune in. Declining audiences lead to further desperation in the business rooms to keep ratings high and the money coming in. So continues the cycle of poor journalism.

In all this, what is worst is that the idea of a free press has been defeated. For one, the model, built on consolidation and scale, denies opportunity to competition: there cannot be independent views, let alone diverse views. In recent years, the Australian media mogul, Rupert Murdoch's Fox News, has grown fastest because it has taken a distinctly partisan decision to represent the conservative and republican side of the US.

Secondly, the model, with its financial imperatives, is as vulnerable today to influence from the state, or corporations, as the one it replaced. It is always argued that governments must not finance or run media; it becomes their propagandist. True. But what happens when government uses the influence of money to change the propaganda of the day? Just last year, the two most respected newspapers of the US, the *New York Times* and the *Washington Post*, both accepted publicly that they had succumbed to biased reporting of the Iraq war. More recently it was found the US media was using 'feed'—stories prepared by government and published as independent news stories. What is surprising to learn that this handout-driven media is then also poached by corporate interests. Or, as I said before, isn't it inevitable?

But what is even more inevitable, then, is that a compromised media will compromise democracy. The media has more than a functional role of contributing to the service sectors of economies. It has the role to make democracies functional. In other words, its decimation is the decimation of democracy. The last election in the US is my testimony.

AND FROM RICH TO POOR

Why am I so obsessed by the media in the US? The problem is that we in India are slowly (and sometimes not so slowly) moving towards the favoured US model of media enterprise. Today, the media—particularly the electronic media—is more and more unregulated. The state has increasingly withdrawn. Its own public broadcaster—Doordarshan—is increasingly inept in challenging the market. The state's role as a

propagandist is rightly condemned as the market takes over the reins of opinion-making in the country. But, wrongly, the media is beginning to cater to audiences that can pay. This will leave out of its ambit what does not matter and those who do not matter.

That would be all right, if the people who did not matter really did not exist. It is true that the middle class in India—the media's clientele—is growing. Market watchers love to point out ad nauseum that there are 200 million people in India raring to shop till they drop. But this hides the fact that there are still over 800 million others who can't shop but can certainly drop. What happens to the news about their everyday world? How will it be reported? Why should it be reported at all?

Let us be clear that an undermined press is also not good for the rich. The fact is that the media plays a watchdog role in regulating and mitigating the adverse impacts of growth. If its role stands compromised, so does its ability to discharge this function and that of keeping democracy functional.

This will, ultimately, hurt all of us. A stooge is a stooge. And it makes a fool of us all. So it is that we must find the balance between the market and public interest in our media. Fast.

6



Writing about the Birds and the Bees

Keya Acharya

Some fourteen-odd years ago, during my initial forays into environmental issues in India, I remember, at a seminar, a government officer (though I very conveniently do not remember his name) trying to prove how environmentally aware his department was.

‘We have planted gardens in our premises,’ he had declared with flourish.

I, then naïve and new to the environmental scenario in India, had been both amazed and shocked at his lack of knowledge on what constituted environmental conservation.

A HISTORY OF POOR AWARENESS

Some years later, a good 5–7 years later, I remember listening to a courtroom hearing of a case, filed in support of conserving a city park against a government plan for construction on the site. All that the petitioning advocate could say, in defence of conserving the park, was of the beauty of its ‘flowers and trees’. He had no argument for the park’s natural system of conserving the city’s water table; of the need for the park’s trees to help mitigate the city’s carbon dioxide emissions; of the need therefore, to keep inviolate lung spaces that could also serve beautification purposes, if the advocate was indeed worried about the flowers disappearing; in fact he had nothing to offer that was of any significant environmental note at all.

That lack of awareness amongst administrative, legal and general decision-making fora has also included journalism on the issue. In the mid-1990s, I remember from personal experience, the attitude inside mainstream editorial and newsrooms: an environmental story was one only if it dealt with the cutting of trees or the planting of them. It was



an uphill task to get a 'gatekeeper' (a sub-editor in charge of various supplements to the main paper) to take a feature on, say, anything to do with natural resource conservation, or even air pollution, come to that. I even remember one instance, some 13 years ago, discussing a story with a 'gatekeeper' about a city park that the gatekeeper-journalist clubbed together, almost equated, with a wildlife park!

Another apt example of what I am highlighting is an instance, this time clearly remembered, of a feature I had written on the environmental conservation methods in soil and water and its relation to agriculture that was being practiced inside a Tibetan refugee settlement in India. It was a story straight from the field, with quotes and pictures; and if the pictures served nothing else but visual appeal, then that too was there, replete with a sea of smiling monks in colourfully bright red robes. The 'gatekeeper' not just totally missed the point on conservation but had a comment when I queried him about the piece:

'We [the newspaper] don't have a policy on Tibet'.

I was so amazed at the journalist totally missing the conservation angle of the story that I took the piece directly to the editor-in-chief and asked him if the environmental message inside the story was not important enough to win over whatever anti-Tibetan sentiments the gatekeeper or his newspaper had. I won.

The point I am making, though, is not about winning or losing, but on the absolute lack of knowledge by journalists on what constituted an environmental story, even into the new millennium.

A SMALL WHIFF

By the late 1990s, some measure of awareness on environment being more than gardening, tigers and trees, did gradually emerge into the public media sphere. One reason for this turn of mind, however slow it may have been, was due to the emergence of environmental issues in India being tackled on a crusading basis by one journalist, the late Anil Agarwal, who founded the Delhi-based Centre for Science & Environment, to pursue government and public attention on the matter.

CSE, together with the fortnightly magazine that he founded, *Down to Earth* (or DTE), fought a long and sustained battle to bring environmental pollution, especially of air, to the forefront of the government's attention. This culminated, after a turbulent phase of lobbying by various interests and general mayhem in putting systems into place, in the mandating of lead-free petrol nationwide and of the switch by public transportation



from toxic diesel to compressed natural gas(CNG), first in Delhi and still continuing to be phased out in other Indian cities. CSE itself has evolved into an influential and premier organisation in research and advocacy on environmental issues.

YET NOT 'HARD' ENOUGH

But here too, awareness in mainstream journalism, in spite of the public hoo-hah over CSE's very vocal battles, has been way slower than it should have been; it was as if the media, especially of print than of broadcast, had decided that environmental stories were not 'hard nosed' enough. Hard stories meant purely political or defence stories, not much more.

Take the case of water-issues as an example. In 2002, I had conducted a survey of coverage of water issues in major English-language newspapers in Bangalore, Chennai and Mumbai for a World Bank-sponsored workshop conducted by the Forum of Environmental Journalists in collaboration with The Hindu Media Foundation.

My survey found the majority of articles were of local State policies, with occasional national stories, while there were numerous articles on the then raging dispute over the sharing of waters from the river Cauvery between the two southern Indian States of Tamilnadu and Karnataka.

While one newspaper (which has, since those days, unfortunately changed its tack and gone more 'consumeristic') had some good articles on consumption and conservation patterns and the need to recycle and reuse water, there were very few articles overall in the entire spectrum of papers on the need for conservation of water. Additionally, there was not a single report on the availability of water for lower-income groups.

Interestingly, reporters found it newsworthy to write of the financing of water systems. There was, for instance, a lot of information on the chief donor and the amount of money being loaned, but absolutely no follow-up stories or 'progress reports': no mention of the allocation of these funds, how they were being used, who was monitoring them, or even their expected returns. The reports treated water projects as financial news items and not as an issue that involved the public good.

'In-house' journalists obviously did not consider a subject as essential as water, something that goes to the core concern of every person in India, 'hard' enough to warrant serious investigation or analysis.

With the exception of some regional-language journalism, several of whom had then taken up issues on water conservation or soil protection on a campaign basis, environmental journalism meant writing or speaking

on, say, tigers and elephants without thought or the need for information on the entire gamut of factors that went deeper into the issue, in this case, into wildlife in India.

Thus even for the 'environmental' wildlife stories, there was hardly any mention of scientific findings on wildlife issues, or on socioeconomic issues that get involved with wildlife issues in India, such as that of tribal communities living inside and being affected by protected areas.

No one cared much: the environment was for those die-hard tyre-burning activists who screamed blue murder each time a tree was chopped or an industrial project was, and still is, being set up. The general perception continues to be that environmentalists try to stop work that could benefit the country and give jobs to others.

Indeed, environmental journalism for at least two decades till the new millennium thought nothing of the implications of our development policies not just to water, but to land, air, and our natural non-renewable resources as well. Or even inversely, through non-implementation of these policies. Its coverage stemmed primarily from environmental activists and NGO protests.

Anything environmentally 'hard nosed', such as corruption in an environmental angle, say in water-based contracts or of almost anything for that matter, was considered to be 'too environmental'.

Freelancing in times of desperation: Small wonder then, that the majority of the anyway few journalists that write on environment and development, have attached themselves to the risky business of freelancing, often riding into rough weather to do so, as my own experience recounted earlier, will give a glimpse into.

Reactions to hard environmental stories were sometimes laughable:

'Why don't you go to *Down to Earth*?' was a suggestion that I have personally, as a freelance again, been handed down in several cases where the story was 'sensitive' enough to concern either politically influential people or name individuals.

FALL-OUTS

This 'side-streaming' of environmental stories was, at the time, curiously enough, the 'other side of the coin', an inversely unfortunate fall-out of DTE's environmental crusading, where mainstream media thought anything environmental was too singular to be of use, conveniently looking at a serious magazine to do the job.



But, and this is a big 'but', I now venture to say that *Down to Earth's* environmental journalism has, for the entire spectrum of environmental journalism in India, been a stepping stone for many of us reporters to a more mature and 'evolved' style of environmental writing; one that encompasses every aspect of our daily living into its fold.

But more of that anon!

In the last half of this new decade, the environment has taken even more of a beating in the Press and in the field. With a market economy taking hold of India, new opportunities for growth, in their need for quick economic returns, have paid lip service to environmental concerns.

And, in its hurry to 'develop', the administration's monitoring of ecological degradation has become even more suspect: its environmental clearances for sensitive projects have caused consternation amongst conservationists and anger amongst NGOs left to deal with the thousands of poor and marginalised being ousted out of their lands and homes for these 'development projects'. Rehabilitation, if at all it does happen, is shoddy; citizens' basic rights to clean air, water, to decent shelter and basic healthcare, food security and access to education trampled upon as they become ever more powerless to demand their rights.

In the globalised free trade market of today where India is being projected by government and media as a growing economic power, a vast section of India's citizens stand threatened with becoming even more poorer. Women and children remain the most vulnerable in this scenario.

And yet, reporting on this scenario is both rare and unusual, in spite of Indian journalism having a lively history of playing watchdog to human rights abuses. Human rights has not encompassed environmental human rights, an issue that has been given a 'backseat'. Today's media has turned to entertainment and commercial news in print, and a dizzyingly multiplying television media that hinges on sensationalism in its bid to compete within its own industry.

Shifting, Not Changing, the Leopard's Spots: And it is because of this very changing nature of Indian journalism and at this juncture in our country's social milieu that I think environmental writing needs to adapt and keep 'in the loop.'

Environmental stories, given its poor history, cannot compete, and indeed should not compete, with today's media stories. They should encompass today's news stories in whatever field they come from: commercial, financial, entertainment, socialised urban, whatever.

If this sounds like a can't-beat-them-then-join-them tack, you may be somewhat right. But for the most part, this is an 'emergency measure' taken in counter to the consumeristic style that the Indian Press holds out to the reader today.

How, you might well ask, is one to inveigle the environment into any story. Ah, therein lies the challenge for environmental journalists. By taking the lead! Let the environment take the lead in your stories!

It may be insidious at first, but I am confident that environmental journalism can be highlighted prominently within a business, an entertainment or political story, in fact in most stories.

Let's take an example again. Let's say a corporate conglomerate responsible for one of the mushrooming cricket teams in the country, is being featured widely in the media. Why not take this cricket club, this corporate body and their directors and find out what their environmental commitments have, or have not, been to the game and to the resources it uses; then find out in economic terms how much gain, or loss, this is costing the game, the State, the country, whatever. Why not then weave this material into a sports or business or general story? A journalist could make this into a news item, a feature, an interview, broadcast clip, anything...

Or take yet another example, politics, something that Indian journalism considers as its holy grail: what's wrong with finding out the party agendas of the politics of the current day and check to see where the environment fits in? Indeed, why not take whatever issue is hitting the current front news in the media and do precisely that ?

The limit seems almost endless for making all stories into environmental ones, from a cigarette company, to a water-supply privatisation concern, to discussing wheat imports, even to a fashion-show being featured prominently in today's commercialised media.

MAINSTREAMING MORES

I realise that this argument of mine falls dangerously near to being oversimplistic. If journalists inside mainstream editorials have such a poor history of environmental awareness, as I said earlier in this essay, then how on earth are most stories going to be environmentally inclusive and portray the country more realistically? What happens to the Poor ?

What indeed, other than of facing the challenge of including these concerns into your reporting. How remains an issue and a challenge that 'environmental journalists' have to tackle. It is true that mainstream



journalists, without any background environmental knowledge, cannot produce good, quality mainstream stories inclusive of environment, not without some good legwork at any rate.

But 'environmental journalists' certainly can. Hemmed in by careless consumer-ridden journalism, hawed in by uncertain work conditions that lend itself to precarious lifestyles, today's environmental journalists need to continue undaunted to face the challenge of influencing the media primarily to pick themselves up environmentally.

And with a very environmentally relevant issue as climate change becoming current news in India, helped by Dr R.K. Pachauri, director of the Delhi-based The Energy Resources Institute heading the Nobel prize-winning Intergovernmental Panel on Climate Change, hope holds out for more journalists to become environmental ones.

And for die-hard environmental journalists to continue writing just so.

7



My Words, It's Still Fun!

Sudhirendar Sharma

Environmental journalism could indeed be fun, literally! That the Maldives will disappear before the advent of the next century under rising sea waters made interesting environmental story in the late 1970s. Three decades later, it's amusing that the island nation hasn't ceased to exist on the world map! Did I read too much into the doomsayers predictions or was the influence of Daniella Meadows and Lester Brown overwhelming? The cause-effect relationship of climate change sensationalism was over simplified, and may indeed be so even today!

If journalism is the 'first draft' of history—incomplete, momentary, and often inaccurately opinionated—then I have long been into it. During the past three decades, journalism for me has grown from being an obsession with byline to a passion for change. Unlike others of my genre, my first decade in it was lost in creating a niche amidst a diversity of periodicals. From *Youth Times* to *Mirror* and from *JS* to *Imprint*, magazines of the bygone era had helped sustain my enthusiasm. Most of these magazines may have ceased to exist, but the generation of writers these nurtured are still in circulation.

Phrasing of ideas and articulation of news couldn't have been without a mix of influences, from individuals, institutions and published information. Place of residence too played a role then. Moving from a small town in the hills to the sprawling capital of the country brought a dramatic change in my world view. Being one of the earliest to be ushered into the environment school at the prestigious Jawaharlal Nehru University had left an indomitable mark on me. It continues to reflect in bits and pieces ever since; the legacy of the erstwhile white elephant of higher education is hard to discount.

With access to exclusive literature from across the world at an arms distance at the university library, re-writing on emerging environmental



issues came handy. The intricate interplay of forces governing changes in the human environment kept unfolding before me. If there was news, I had a nose for it! No wonder, when *The Times of India* had launched its 16-page weekly section called 'The Review' in the early 1980s, I had a co-authored story 'One Day It May Rain Acid' prominently displayed in it. The threat to the historic Taj Mahal by the controversial Mathura refinery was the backdrop to the story. Interestingly, both co-exist though the Taj may have taken some beating!

REALITY CHECK

All said, I was one amongst scores of journalists who had covered the environment during early years without embracing the extremes. Barring few, most of the environmental writings of the 1980s were an exercise in scaring readers anyway. Even at the cost of being repetitive, there was little let down in giving alarmist spin to the story—pesticides in food, pollutants in the air, hole in the ozone layer and so on. Environment had become a staple of most newspapers; any average story stood ample chance of being published. No wonder, stories written in a moronic fashion had started mushrooming, apparently written by those who didn't understand what they were writing about.

What competitive edge did I have over those writers who were churning out environment stuff frequently? Did a degree in environmental science make any difference? I was in for a reality check as I was fast becoming sceptical of my own writings, as much as that of others. Without sounding apologetic, the crux of the matter instead was that we are reporting research over which we had little control. Unlike in the West, back home much of the derelict environment predictions were not being contested either by the readers or the editors. Yet, one could sense some kind of fatigue descending on the media.

In his response to my offer to write on environment for *New Delhi*, the magazine that didn't last long, the one and only Khushwant Singh had written: 'Environment doesn't sell.' It had left me dumbstuck! For a moment I was furious with his one-liner but had soon realised that the legendary *Sardar* had only shown me a mirror. Though not trained as a formal journalist, I had passion and commitment to sell environment stories against odds. I suspect there were several of my kind pushing each other for the limited column inches that were on offer in the print media.

Undoubtedly, the likes of me were unintentionally distanced from reality. Unlike Indira Gandhi who had opined that 'poverty was the

greatest polluter' at the Stockholm Summit on Human Environment 1972, we were still writing about environment concerns of the West, viz., acid rain, ozone depletion, and so on. Does academic conditioning distance one from the ground truth? Hearing about the historic decision to shelve the hydroelectric project at the Silent Valley and the judicial position on the incredible Chipko Movement in the seminar halls had lent a helping hand in taking a detour from armchair environment journalism that I was glued to.

GREEN DILEMMA

The slopes were getting green, the idea of conserving water was reflected in the two majestic check dams in the Shivaliks. Those who were once struggling for cattle fodder had enough milk to spare for occasional visitors like me. The life for the Gujjars had gone through a dramatic change, poverty had been shown the door in the Sukhomajri village. Perhaps my first convincing outing into the countryside, the village tucked upstream of Chandigath's picturesque Sukhana Lake had become my popular destination for many years to come, ever since I had visited it during mid-1982.

With degrees in physics and philosophy, P.R. Mishra was rare amongst his contemporaries. In his inimitable style he had once quizzed me: 'have you been able to understand Sukhomajri?' Having seen protected hill slopes, an enthused village community and a couple of check dams filled to the brim, my response was in the affirmative. So amused was the man behind the project, which eventually launched the country's watershed programme, that he could not hold himself to say that I was yet to understand it! Years later, I now realise that getting to understand the dynamics of natural systems is one hell of a subject too big for a lifetime.

Between check dams and large dams, the gulf was treacherously wide. Were small dams an alternative to the big structures? Could power be generated without inundating large tracts of land? Sunderlal Bahuguna had his set of arguments cut out against then proposed Tehri Dam. With his distinct headgear, though in white, he was dubbed one of the earliest 'environment terrorists' of his time. Having started camping inside the submergence area of the dam, he had become the toast of the media. I had teased him once: 'it will be an unbelievable headline the day you'll take *jal samadhi*.' That had brought curtains on our rather friendly relationship!

It was a shocking revelation that some of the best in the business of environment were conscious of their territorial jurisdictions. Often



fighting for the same turf, they were found working at cross purposes to each other. The environmentalists were a divided lot, with the media playing its part in promoting one at the cost of the other. The legacy of 'divide and rule' had sustained itself. The work on the controversial Tehri dam was going on at high pace. It was evident that the dam will be built soon and the forlorn crusader of the bygone era will have to resign himself to history books. But will lessons ever get learnt from it?

It was hard to believe that in a country where the much-hyped Silent Valley hydroelectric project could be put to rest with the stroke of a pen, several hundred column inches of writing deploring the project were inadequate in repeating the feat in the case of the controversial Tehri Dam. 'The apolitical nature of social movements was up against the politics of development,' I had argued in one of my articles. It was 'nt a level playing field though, with odds tilted in favour of the powerful stakeholders. Opposition to several mega-projects were inconclusive, pulling activists into the convenient domain of service delivery for fighting poverty at the grassroots.

ALTERNATE MEDIA

With hundreds of written stories on diverse environmental issues behind me, an opportunity for being part of the mainstream media was somewhat expected. A short stint at the *India Today* was a great learning experience. In addition to rubbing shoulders with some of the big names, how a handful of journalists decide what the majority must read had begun to unfold! I'd always wondered why a human interest story would get pushed to the 'back of the book' section at the cost of a story reporting on the inevitable ageing of a political supremo named Sitaram Kesari? That aligning with the powers-that-be was akin to being counted amongst the 'powerful' seemed to be the unwritten logic.

Raising concerns of the grassroots through an alternate media, on the lines of parallel cinema, seemed the order of the day. Building and nurturing a constituency was critical to sustaining newfound environment consciousness. The passion and drive were in plenty, and so was perhaps a committed readership, but the requisite capital was nowhere in sight. The rights to re-publish *The Ecologist*, a well-known environment magazine from the UK, were secured without strings. However, getting it on to the newsstands had remained an unfulfilled dream ever since.

Around this time, a young Nepalese journalist had walked into my one-room office. After years of serving the UN as a mediaperson, he was

planning to launch an environment magazine from Kathmandu. That gentleman had learnt of my interests from the Ashoka Foundation, a US-based organisation that had bestowed fellowship on both of us for public service entrepreneurship. I had helped him in every possible way, giving vent to my unfulfilled ambitions in the process. Though we haven't stayed connected ever since, both Kanak Dixit and his brainchild *Himal* have continued to flourish.

I had to contend with what I could afford the best, edit and publish a Hindi language quarterly on environment and sustainable development. Named *Vikalp*, meaning 'alternative', the magazine had acquired a respectable readership in a short time. However, it didn't translate into the desired number of subscriptions for meeting the production costs. With a handful of budding writers, we published it for as long as we could take the toll of doing everything ourselves, from writing copy to organising pictures and from maintaining subscriptions to mailing copies. In hindsight, it may have been worth the cause had there been a method in that madness!

All said, it remains a milestone in environment literature and an experience worth sharing. It must however be said that an alternate media may indeed be a bad idea if it can not create a significant readership base to amplify voices to influence policies. The very notion of alternate media often has an ideological base with a mission. I have learnt it the hard way: those who are passionate about environment must not pursue active journalism and those who stand to do objective journalism must stay away from being passionate about the environment. Either way, it doesn't serve any purpose.

GETTING FOCUSED

It may seem that I had burnt myself on several fronts at the same time. But for me, environment journalism has been an evolving engagement, a process in which one was able to check on one's capabilities and capacities as new environmental challenges were tossed from time to time. If pollution and poverty were issues in the past, scarcity and survival were the current issues. However, in the pursuit for economic growth, concerns for the environment were put on the back burner. Quite often it seemed that the good work of creating environmental awareness during the 1980s and 1990s had been lost.

I was ready for new challenges unlike many who had sought to drift into 'business'—the new window of opportunity in up-market journalism.



My renewed commitment may have something to do with the birth of my son. Since he was born on the world environment day, many wondered if it reflected my commitment (or that of my better half) to the environment. It did, however, reflect lack of commitment for some of my erstwhile colleagues whose offsprings had missed dateline environment by few days on either side. Either they were sucked into the system or had chosen more lucrative career paths. Pure coincidence, I'd imagine!

But I knew there was a road ahead for me. The gigantism of development had started to surface yet again. We had a task at hand. Fresh affiliations and new associations were on the horizon as the country got ready to alter its geography by embarking on the ambitious task of linking its rivers, from north to south and from east to west. Water became the foci of my writings ever since. I had never stopped to think what a magical substance it is, with a special meaning for everyone. A new form of consciousness had started to dawn upon me. I had begun my schooling yet again! It was the return of the familiar debate on dams alongwith all pervasive discourse on water harvesting. Commodification and privatisation were components of market-driven hydrology.

The growth engine has been trying to consume everything in the process as social space gets usurped by a market economy of malls and multiplexes. Poverty no longer gets registered as in the past. The surging middle class is upset when it is reminded of that old blight. The poor are to be dispensed with for making space for special economic zones, even if it means forcing many to commit suicide. A new culture of self-annihilation is upon us. It will demand a journalism of a kind that will not only question the dubious processes but confront the invisible forces of self-destruction as well. I often enthuse myself with the famous one-liner from the irresistible Hindi film *Sholay*: 'Ab aayega mazaal!'

In many ways, it is fun to rearticulate and reposition oneself to confront a new situation. It indeed burns the creative calories in you, but the impact is immensely satisfying. With the democratisation of communication technologies, it is a fresh new game to confront the market forces that operate under the veil of democracy. Clearly, the rules of environment journalism are being rewritten!

8



Problems of Aesthetics and Misplaced Altruism: Media and Environment in Northeast India

Kazimuddin (Kazu) Ahmed

I think that the modern age of the history of truth began at the moment when empirical knowledge itself, and on its own, allowed access to the truth. That is, from the moment when, without asking anything else of the subject, without the being of the subject having to undergo any modification or alteration whatsoever, the philosopher (or scientist or anyone looking for the truth) was capable of recognising in him or herself the truth and had access to the truth by the mere act of empirical knowledge

—Michel Foucault

A NOBLE QUEST

It was the beginning of 2008, the immediate aftermath of holidays and celebrations. There were resolutions galore for the New Year and it was perhaps with this spirit that an email was circulated among individuals and organisations working on social and environmental issues. The sender was a journalist working with one of the leading news channels of India. He wished to do a story on the destruction of hills in and around Guwahati, Assam. Someone from television picking up such a story at the wake of the New Year seemed rather promising to the usually forlorn pages of environmental reportage in the region. My exhilaration, however, was painfully short-lived. The optimism towards a promising year for sound environmental reportage was cut short by the story this gentleman proposed—he wanted to carry the story because he believed that destruction of hills had led to depletion in wildlife and to the near extinction of many varieties of animals found in and around Guwahati.

He came a couple of decades too late. The only wildlife visibly living in Guwahati—apart from the zoo—are a few jackals, mongoose, a



few squirrels, a few species of birds and perhaps a mild assortment of common creatures including Rudyard Kipling's Bandarlog with extremely high nuisance value. Around Guwahati, where land is being consumed fast by the ubiquitous construction frenzy, there perhaps is a larger, but a fast decreasing population of wildlife. A reality check would reveal that wildlife as such had long vanished from the swamp that Guwahati was.

Their present existence is mostly in faded pages of dusty memoirs written by Guwahati's now extinct hunting aristocracy that carried out regular expeditions to Dipor Beel, now a Ramsar Site in a state of rapid decay within the limits of the Guwahati Municipal Corporation. Arguably, a search for wildlife in the degraded hills and swamps in and around Guwahati is a noble and romantic exercise in futility. Unusually, however, such are the tasks undertaken by many who feel it as most noble a duty to save wildlife despite its non-existence, and consequently perhaps be a part of some heroic group akin to those in DC comics saving the planet.

ISSUES VS. REPRESENTATION

This incident of wrong treatment sans diagnosis does not in any way undermine the importance of the issue of hill destruction. As concrete structures fill the hills levelled by huge digging machines with monstrous teeth, signs of impacts of this destruction are only too palpable. Come monsoon and news of deaths due to landslides fill the pages of local dailies, even if it is only for that particular day. Alarming, such days are increasing. Suspended particulate matter (SPM) and respirable suspended particulate matter (RSPM) levels are always critical or high and are on the same trajectory as the monsoon deaths. Hydrological patterns in Guwahati are allegedly changing and ground water levels are dropping faster than one can imagine as land and water resources in and around the city are being squeezed dry to feed and house more than a million people. This environmental degradation will only put final touches to the blueprint of the demise of whatever little flora and fauna thrive in the hills of Guwahati.

Clearly, there are two narratives to this hill story. One is of the larger picture of environmental degradation and the other is of a few pixels—sometimes unfounded—of that large picture. Unfortunately, the latter has become a trend of sorts in environmental reporting in the region. Instead of an issue crucial for humankind and its habitat, environmental reporting has been made an issue appealing to the aesthetics. The consequence is

a one-page feature on wildlife with coloured photographs and little text. Even in this arena the reportage is not complete. The unprecedented coverage that a few dead rhinos received in February this year perhaps took even this normally media savvy lot by surprise. At the same time, the habitat and population of the Sangai deer is on a rapid decline along with the ecosystem of the Loktak lake in Manipur. But a report combining scientific data and creative writing on the Sangai and Loktak would not be so easily available. Evidently, aesthetic environmentalism and environmental reportage influenced by it is also selective.

Articulation of a direct correlation between destruction of natural habitat and rising land, water and air pollution in Guwahati is not an impossible task despite availability of primary scientific research and data. Even speculations of such correlations are conspicuously absent from information on environment doing the rounds in the public domain leading to the absence of any debates save bitter and exasperated conversations in drawing rooms. So, as people seem to be crying foul with the destruction of hills in Guwahati, there is a profound silence on change in land-use patterns from sustenance crops to cash crops like *Jatropha* and the pitfalls of the same. An analysis on relations between this changing land-use pattern, diminishing livelihood options and conflict would be asking for the moon and the stars. While this complete lack of cognisance and analysis regarding environmental issues is reflected in the larger scenario of environmental reportage, Al Gore and R.K. Pachauri bagging the Nobel Prize with the phrase 'climate change' mentioned a few times is sometimes taken as intelligent coverage of environmental issues.

THE NORTHEAST AND ITS MEDIA

Northeast India is a colloquial term used for seven federal units of the Indian Union—Arunachal Pradesh, Assam, Manipur, Mizoram, Nagaland and Tripura. The eighth federal unit, Sikkim, is used in the official categorisation and definition of the Northeast. Both definitions and categorisations are now debated from various perspectives of identity, nationalism and purported opposition to a homogenising project. For reasons of convenience of various sorts, this chapter will stick with the conventional definition of Northeast—that of the seven federal units.

Located between 22–29°N and 89–97°E, this region has unique ecological, sociological and geological characteristics fascinating and significant to everyone from colonial anthropologists to present day



environment crusaders well versed in the mechanics of funding. The more than 400 ethnic groups inhabiting this 2,55,168 square kilometres of land have their own ecological languages to converse with these varied environs. This has led to the emergence of an extremely rich culture around existing environments as the ecological layers of the region range from tropical forests to snow capped mountains. Positioned between the boundaries of the Indian, Burmese and Eurasian plates, this region is seismically quite sensitive, with a high level of precipitation and juvenile soil cover. With such characteristics, this region is a wonder-web of nature—flora and fauna, water bodies and landscapes housed in their own unique ecosystems.

Lately, the region has also developed a massive and flourishing media industry. Among them, the seven federal units have 1,549 newspapers and journals registered with the Registrar of Newspapers in India (RNI), in languages ranging from local languages to English and Hindi. Circulations vary from 500 copies to nearly 2,00,000. Even if one puts the percentage of publications meeting with untimely deaths at 40, it would still be a large number. It looks like a very encouraging media scenario. But one must understand the nature and history of media in this region to comprehend the present media politics that so influences reportage. In places such as Manipur and Assam, the history of media is fairly old, with missionaries during the colonial era bringing in the printing press to Assam in 1846 followed by Manipur getting its machinery in 1917. More than 150 years after the first printing press, newsrooms of satellite channels based in the region are now designed in the USA.

The other aspect of this region with a considerably long history is conflict. It has been a locale for conflicts where small nationalities have consistently resisted the larger state. First it was the British and now the Indian state after transfer of power, as is evident from the numerous armed opposition groups fighting their unequal battles with the government with demands ranging from autonomy to secession. But the crucial role presently played by the sections of the media as a part of the government's psychological operations in conflict management is different in character from its role during the colonial era. The advent of printing in the region had heralded a new era of an informed and educated section of society in the colonial period which was deemed to be better equipped to fight the imperial forces of the British. After the transfer of power, the media in the region briefly dwelled upon news as well as cultural affairs, including enhancing existing literary flows and quality.



THE POLITICAL ECONOMY OF THE INFORMATION IN THE NORTHEAST

One of the radical shifts in media took place with the resurgence of movements for self-determination in the region. While the Naga struggle for independence has been on a continuum since India declared itself a republic, many ethnic groups within the region gradually started voicing their political aspirations as nations and peoples sometimes demanding autonomous status within the Indian state or ethnic homelands in various parts and sometimes complete secession from India. Identity has always been a significant question in these struggles and the media was inducted to this process of assertion of identity. Despite larger market dynamics and the economics of controlling the information as the present behavioural patterns in the media, it has also adapted to working within the global market structure while all its elements feed into local political dynamics abundant in a politically hyperactive region such as this. With such heavy preoccupations, the environment question rarely finds space despite unquestionable relevance.

It would of course be unfair to discount dedicated journalists consistently working on environmental issues or at least trying to do so. But being a journalist in the region and securing some decent newsprint space for dedicated environmental issues is mighty rare.

What is reported on environment in the region comes out mostly in weeklies and periodicals in the local languages. The only wholesome environment/development publication that is known to exist in the region is *Grassroots Options*, a magazine based in Shillong and run by a collective of journalists. They zealously managed to have a website (www.grassrootsoptions.org), but updates have to wait sometimes due to lack of resources. Otherwise one has to be a senior journalist to write on environment and get some regular space, or one has to write for websites and other publications such as *Down to Earth* and *Himal Southasian* that are published outside the region. It would not be untrue to mention that most analytical environmental reportage from the region are not published here, but in publications from other parts of India that sometimes send reporters to travel and file field reports. One can confidently argue that environmental content published in media in the Northeast in the last two decades cannot match content that was published in one single special edition of *Sanctuary Asia* on large dams in the region in 2004.

But such reportage involves primary research and travelling to various locations, a privilege that mediapersons in the Northeast can rarely



manage. During a series of interviews and discussions I had conducted to assess the research environment in the media of the region, voices at many places told me this in as many words of angst:

There are dedicated journalists. But dedication alone does not suffice for a good report. One needs research and research needs time and resources. Where is this window when a journalist is paid anything from Rs 600–3,500 a month and is constantly needed to fill in spaces with reports that would sell?

This, today, is the reality of the research environment in the media of the region. The 1,500 publications and television and radio with all their reach have failed to start a new era in plurality of voices and themes in the public domain, let alone generate debate on issues crucial to people's lives. This brings forth the crude reality of media being increasingly controlled by market economics and numbers determining the editorial trajectory a publication or a media house takes. The saleability factor does not leave much space for debate and analysis on issues of environment. It effectively determines that issues such as politics and entertainment with sensational value are going to be the preoccupations of editorial policy. The rest, to a large extent, is lip service with little or no imagination in developing new discourses for debate.

This does not leave out radio and television as well. Apart from major satellite channels based outside the region and the terrestrial national Doordarshan, this region now has two satellite channels and a number of cable channels based in major towns like Guwahati, Imphal and Kohima. Satellite channels based outside the region do not operate their editorial policy in quota of reports. Reports from the region are incorporated after assessing their saleability, or their implications with 'national' importance or if they feed into certain political dynamics. The terrestrial Doordarshan is content feeding on the region as a culturally exotic locale when it is not reporting about bombardment of bullets or mayhem of bombs, or functions and dos involving state bigwigs. The cable channels mostly do local news and entertainment and the two regional satellite channels are presently busy throwing muck at each other. To find any space for analytical environmental reporting in the middle of any of this would be a serious joke.

Other factors are at play too, the most crucial ones being ownership and affiliations. The 24×7 satellite channels in the region are owned by politicians, as are several newspapers. Big business houses own other media establishments and as is the case in other publications outside the



region, editorial policies are determined by where the interests of the media houses lie. For example the state-run television and radio would not incorporate anything against government policies. The detrimental impact of the 168 large dams in the region would never be talked about. These factors too largely chart the paths of the media information regime.

This regime, though, has other players. In a scenario where negligible or no imagination shrouds environmental reportage, one would ideally look towards advocacy groups and activists to have some much required data. Tragically, environmentalism in this region is limited to wildlife and forests. One would know the 215th worm in an elephant's stomach or the 14th hair on that hardened mass they call the horn of the rhino, but there is no information on air, water and land pollution, or, changing ecosystems, land-use patterns and livelihoods.

There apparently are organisations that address these issues too—to the extent of banning plastic bags and beautifying urban areas. Academics too have some information in journals and research papers stashed away in libraries never to see the light of the public domain. It can be argued, again with considerable amount of definitiveness, that larger environmental research and related dissemination of information to the public domain is virtually non-existent in the region.

SPECIALISATION, TUNNEL VISION

This would perhaps be another interesting signifier to environmental research in the Northeast. Domiasiat in Meghalaya has some of the largest Uranium deposits in India and the Uranium Corporation of India Limited (UCIL) has been on the trail of this deposit for a few decades now. The tempo is picking up presently and mining does not seem too distant with the usual drill of environment impact assessments (EIAs) and other formalities almost completed. There are organisations that have protested against this mining and extensive meetings were held to garner support for this opposition and to influence policy. About the same time as the aforementioned TV journalist wanted to do his story on hills, another print journalist embarked on an extensive piece on the uranium mining issue.

A month later, she was still running from pillar to post looking for corroborative information and research on the subject as 'meat' for her story. Organisations purportedly engaged in advocacy work on the issue gave a lot of 'quotes', but not an iota of concrete data that could have helped.



This is the present state of all aspects of environmentalism including environmental reportage in the media of the Northeast. The quality of content in the media here does not match the ecological richness of the region, but goes neck to neck with the environmental degradation that it is witnessing. Journalism's benchmarks of truth, analysis and credible information are not manifested in most of whatever little environmental reportage is produced. As the significance of Foucault's empiricism takes a beating, the public domain is flooded with mediocre information and words that fail to make any sense other than satisfying a mere grammatical structure. It is rather queer that the emergence of an information regime of massive scale is also obscuring information on selective issues. As far as environmental information is concerned, one can't help but wonder if this powerful tool for generation of knowledge is fulfilling its noble purpose or merely contributing to, as Mark Hobart would say, the growth of ignorance.

9



Good Journalism, That's All

Kalpana Sharma

Journalists are good or bad, professional or unprofessional. I am not sure if other labels such as 'environmental' or 'developmental' ought to be tagged on to journalists.

Covering environmental issues requires a set of skills that are essentially what you need if you want to be a good journalist. You need to know something about the subject you are planning to write about. You need to be interested in it. You need a degree of scepticism. You need to talk to people. You need to get people to trust you so that they tell you the real story. You need to be observant. You need to be curious. You need to double-check, cross-check, double-check, cross-check. And of course you need to be able to write.

None of this means that there should not be specialisations. There is much to be said for allowing journalists to focus on areas like the environment. This allows them to develop contacts, collect specialised information, and in general be better equipped to report on a range of issues that would generally come under the rubric of environmental reporting.

TRAILING IGNORANCE

But specialisation does not mean developing tunnel vision. This is why journalists who report on environmental issues should think of themselves principally as journalists who happen to be covering the environment. For environmental issues cannot be viewed in isolation. In India, in particular, environmental issues are located within the political and economic discourse. It is essential to engage in these larger discussions if we are to report intelligently on environmental issues.



One of my early stories on an environmental issue was a report I did for the Centre for Science and Environment's First Citizens' Report on the State of India's Environment in 1982. I was sent with another journalist to look at the state of the forests in Meghalaya and Assam. We soon discovered that the story could not be written merely by speaking to forest officers or academics working on forest issues. Central to the problem of depleting forests was the nexus between the timber lobby and local politicians. There were other layers such as tribal rights, community forests, how measures meant to protect forests were subverted. Foresters and politicians alike blamed tribals for their slash and burn form of agriculture. None of them would speak of the timber lobby.

It was presumed that if in tribal areas the community jointly owned forests, there could be no destruction. Yet entire hillsides stood naked, symbols of the consequences of commercial interests overriding environmental concerns. Without understanding the politics and the economics of the region, we would never have understood why forests were being depleted in this region.

Similarly, the Bhopal Gas Disaster in 1984 was not just the world's worst industrial accident. It was also an intensely political story. It raised questions about the way the industrial location policy was implemented. It led to questioning about industrial pollution and the state of industrial units using hazardous substances. It revealed the indifference of policy makers to the interests of poor people who were allowed to live in the vicinity of such a hazardous industry without knowledge of what to do in an emergency. And it exposed the inadequate health infrastructure when the emergency did occur, on the night of December 2/3 1984 when thousands of tonnes of deadly methyl isocyanate spewed into the cold night air in Bhopal. Thousands died that night; many more since then and tens of thousands have struggled with serious physical impairment.

Bhopal is an environmental story but also a political one. It has already illustrated the power of big industry over government. It has shown how difficult it is for victims who are also poor to get their voices heard. It is a story that can still be written because the problem has not ended.

Similarly, the struggle over the Sardar Sarovar Project on the Narmada River brought out so many aspects of the developmental story in this country that it could not be categorised only as an environmental story. The resistance to the construction of the dam by the Narmada Bachao Andolan (NBA) brought into the public arena the concept of 'destructive development'. Till then all development was considered good. Dams were the temples of modern India, people were told. Therefore, how could something like a dam be considered destructive?

Yet the questions raised by NBA exposed the destructive nature of the dam, the forests it submerged, the people it displaced, the irreplaceable symbols of the history of the valley that it would drown like the Shoolpaneshwar temple. Who would bear these environmental and human costs? Had they been factored in? Would the electricity generated by the dam and the irrigation waters released be cost-effective if these costs were included? These questions were essential to the debate on whether the dam ought to be built at all and if so, how it should be built. The answers to the questions were deeply entwined in local state politics and in central policy on the kind of developmental model India chose to follow. You could not escape being informed about these larger issues if you wanted to report on the specific aspects of the struggle against the dam.

Take another, more recent, environmental disaster, the flooding of Mumbai in July 2005. On one day, the city saw 944 mm of rain come pelting down virtually unannounced. The city was caught off guard. People rushing home from work were suddenly wading through waist high water. Trains and buses stopped. Roads were jammed with vehicles. And the rain kept pouring.

POLITICAL, DEVELOPMENTAL AND ENVIRONMENTAL DIMENSIONS

The story once again had political, developmental and environmental dimensions. Political because politicians have decided how Mumbai should develop and the course they have chosen has virtually written the script for such a disaster.

Developmental because these politicians adopted a developmental pattern for the city that paid little heed to basic infrastructure like storm water drains and instead concentrated on building flyovers to guarantee faster movement for privately owned transport. Meanwhile public transport, the lifeline for 80 per cent of the city's residents, was neglected.

And environmental because in their wisdom, politicians decided that wetlands were wastelands that could be reclaimed and used for construction. They did just that to create land for the new business hub, the Bandra Kurla Complex. They turned a blind eye when the Airports Authority of India decided to divert a river, the Mithi, that flows from east to west and empties out into the Arabian Sea at Mahim. As a result, when it poured on that day in July, the drains could not take the water out, the swollen sea pushed water in and there were no wetlands to absorb this



sudden surge in the Mithi. Water rose and filled the roads, the compounds and ground floors of buildings, the railway tracks, the highways—a large swathe of Mumbai's suburbs.

Here was another example of a story that could not be narrowly defined as 'environmental' although that was an essential angle.

What I am arguing, therefore, is that it serves no purpose to bring in such categorisation when what we need is better more professional journalism all round. The tragedy today is that much of what passes off as 'environmental' journalism is no more than handout journalism. Many environmental non-governmental organisations have special communication officers and have developed an effective communication strategy. Some even hire public relations companies to do that job. It is easy for journalists to take the material handed out to them and simply reproduce it, passing this off as 'environmental' journalism.

Since the late 1990s, there has been a visible decline in investigative stories on environmental issues. There was a time when the media played the role of watchdog when it came to industrial pollution or municipal waste being dumped into local water bodies. Where are these stories now? Has such pollution stopped? Have our pollution control authorities suddenly become more effective? Or have journalists stopped this kind of writing?

I would suggest that the reason for the decline is directly proportionate to the increase in the influence of corporate India on the media. Advertising now constitutes the major portion of the revenues of a newspaper or a television channel. And media houses view themselves as independent profit centres, unlike in the past when owners had other industrial interests that subsidised the newspaper business. Media is now big business on its own. And stories that offend big business are not welcome as a rule. Thus, investigations into the operations of industries located in rural areas, or the devastation caused by mines to people and the environment, or the destruction of local vegetation consequent to the construction of a thermal power station—stories that were written in the past and followed up for many years—have now become rare. No prizes for guessing why.

As a result, the only people carrying out these exposes are activists and environmental groups. And with media houses being wary of the 'activist' label, journalists who want to follow up on these exposes have a hard time selling their stories.

We need more good, professional journalism and we need more stories on the environment. There is no question about that. Creating spaces for such writing in a media increasingly obsessed with celebrities and big business has become tough if not impossible.



One entry point is the increasing civic consciousness of urban dwellers. They have become the watchdogs, people who constantly remind the media about the problems that the media ought to cover independently. These groups are also effectively using the Right to Information (RTI) Act for their fight, whether it is against a builder, the municipality, or an industrial house.

Journalists writing on environmental issues can use RTI effectively to get the information that in the past was difficult to obtain. Pollution Control Boards, for instance, are supposed to keep records of pollution levels, of both air and water. But they are usually reticent about letting journalists look at such data. You have to develop a contact inside the board who will be willing to get it out. Today, the RTI gives journalists a legitimate way of getting hold of such data and making it public. The need for good, effective, investigative 'environmental' journalism, or stories on environmental issues, is greater today than at any other time. Under the euphoria of progress and economic growth, irreversible destruction of India's environmental assets is taking place. The media can expose this. Yet it is not doing so, caught up as it is in the hype of globalisation and growth.

10



Media is No Longer the Fourth Estate

Devinder Sharma

It was in the early 1980s. I had just joined as the agriculture correspondent of the Indian Express at Chandigarh. My intrepid journalist colleague, Sanjeev Gaur, who was later stabbed outside the Golden Temple in Amritsar at the height of the Punjab terrorism, was visibly upset. He filed a disturbing news report, which obviously donned the front page of the newspaper. The report and its follow-up still continue to haunt me.

A mentally retarded beggar, who was quite a familiar figure to those who frequented the central shopping-cum-office plaza in Sector 17, was so hungry that he couldn't resist picking up a bottle of toned milk from outside a shop. No sooner had he gulped it down, he was rounded up by the shop owner and thrashed, and was then handed over the police. He was put in jail. His crime: he had 'stolen' a milk bottle that probably cost not more than Rs 3.

A week later, he died in police custody.

NOT EVEN REMOTELY OUTRAGED

Twenty years later, I am amazed that the country's elite and educated are not even remotely outraged when told that a few hundred of the rich and bold have actually defaulted (they call it non-performing assets) the nationalised banks of Rs 1,60,000 crore. Not many have stood up to question that why are they not in jail. Instead Rs 45,000 crore out of this amount has already been written off. Not many are probably aware that less than 10 per cent of it—Rs 10,000 crore—is what the nation needs to feed its 320 million people who go to bed hungry. Not many would even care to know that India's population of hungry and malnourished is almost equal to the combined population of the European Union. Invariably, at the time of the presentation of the annual Budget, you see them lined

up in the Confederation of Indian Industry (CII) or Federation of Indian Chambers of Commerce and Industry (FICCI) headquarters, frowning and criticising the government for pampering the farmers. The electronic media broadcasts it live. It is the media in fact which asks industrialists to give numbers to the Finance Minister. They applaud the Finance Minister if he succeeds in opening up the government's limited treasure chest for the sake of the industry. They despise the huge subsidies that country's 550 million farmers, with an average land holding size of 1.47 hectares, receive on an average. The industrialists are visibly upset if the Finance Minister fails to oblige them. After all, they are the symbol of growth. They need to mop up the country's treasure for the trickle-down to take effect. But why not ask the poor and poverty-stricken as to how much the annual budget exercise is for them? When was the last time you saw media barons asking farmers, the pavement dwellers and the poverty-stricken to comment on the budget and give marks to the Finance Minister?

Take Budget 2008. Finance Minister announced a debt relief of Rs 60,000 crore for farmers owning less than 2 hectares land. Such was the uproar from the mainline media, economists and the corporate bosses, that everyone termed it as a political necessity in an election year. Economics has been sacrificed for politics, screamed newspaper headlines. Where will the money come from, the electronic media kept on asking. No one had ever questioned the income relief the Finance Minister had every year showered on the industrial houses. Reduction in excise and other rebates, including personal income tax for corporate bosses had totalled nearly Rs 10,00,000 crore since 2004–05. No questions were ever asked, no eyebrows ever raised. But when it comes to providing some succour to farmers, the media is upset. Look at some of the other disturbing scenarios. At a time when the country is galvanising in the artificial spirit of 'feel good', no one noticed the cries of a one month old baby who was sold by her mother for a mere Rs 10. For Sumitra Behera, 35, a resident of Badibahal village in Angul district of Orissa, selling her one month old daughter was perhaps the only way to feed her two other daughters—Urbashi, 10, and Banbasi, 2.

In the month of December 2003, three other families grappling with hunger in Angul, Puri and Keonjhar in Orissa had reportedly sold their children. Two decades earlier, the nation felt outraged when a major newspaper bought a woman for Rs 2,000. The intrepid reporter, who risked his life to investigate the shoddy and inhuman trade, wrote in his columns that even a pair of shoes would cost more. It doesn't require the investigating skills of Ashwini Sarin anymore to lift the veil behind which



remains the hidden face of India Shining. You can now buy a child for less than what you pay for a bottle of mineral water. In fact, you can even 'buy' a wife for a Haryana lad (the state is faced with a highly skewed gender ratio) from the Northeast states for as low as Rs 50,000 ! As abject poverty remains buried behind the façade of the feel good factor, there is excitement in the air. The German luxury carmaker, DaimlerChrysler, has launched the most luxurious car in the world in India. At Rs 5 crore a piece, the upwardly mobile have already begun to queue up. This comes at a time when IPL brings instant cricket to a cricket crazy nation. Also, when Amitabh Bachchan has reinvented religious fundamentalism visible through his frequent family visits to every second temple that we know of. And he is happy reciting boring lines of a poem for 'India Poised' that *The Times of India* had launched. Selling dreams is no longer the prerogative of Bollywood. Despite the Planning Commission pulling down the percentage of poor and poverty stricken from its unread documents, the magic trick of playing with numbers hasn't made any difference to the growing disparities. Amidst recurring political elections, and the brazen marketing hype to sell images of growth and development, the shameful paradox of hunger at times of plenty has been quietly buried under heaps of grain that continue to rot in the open. That 75 lakh people, more than the population of Switzerland, had applied for a mere 28,000 lowly-paid jobs in the Indian Railways, is no longer a matter of concern at times when the country is on a fast track information highway. Not to discount the achievements in information technology, the fact remains that IT has provided only five lakh job opportunities. The BPO service industry that we hear about every other day actually employs only 1.6 lakh people.

GOING GA-GA

And yet, the media goes ga-ga over the IT sector. Former Infosys chairman Narayanamurthy continues to be interviewed as if he is a demi god. No one has ever asked him as to how much subsidy has been doled out for the IT sector? No one has asked him how much land he must grab from the state at a throwaway price? No one has ever asked him as to how Infosys claims to have over 15,000 rooms built, beating even the largest chain of hotels in India. No one has asked him as to how the average citizen of Bangalore continues to silently suffer because of the market distortions wrought in by the IT employees—prices of essential commodities have gone up, the price of real estate has gone beyond the reach of an average person, the city roads are jammed because of the new found richness of the IT employees. A few people prosper at the cost of millions.

And that often makes me wonder whether the media has any social responsibility? Or is it that under the garb of 'social responsibility' it is promoting the commercial interests of a few? In other words, is 'the media only of the rich, by the rich and for the rich?'

To say that poverty is the worst polluter, and not industrialisation, is a conspiracy to keep the dirty industries afloat. No questions are asked when the Finance Minister P. Chidambaram makes some absurd arguments defending his government's flawed economic policies that actuallyacerbate the environmental crisis. If industrialisation isn't the worst polluter, then may I ask how come the world is debating cuts in emission standards in the Kyoto Protocol negotiations? How come we are talking of global warming and the measures to reverse the process? Why should the Intergovernmental Panel on Climate Change (IPCC) get a Nobel prize for warning and spelling out measures to reduce global warming by taming the industry? When was the last time you heard the international community talking of battling poverty to remove environmental pollution?

Let us face it. The media is merely acting as a sound board for the big business and industry.

I often wonder how can Kyoto Protocol make any sense as long as we go on promoting free trade under the World Trade Organisation (WTO). In fact, the two major global negotiations centre around climate change and free trade. Isn't it common sense that the more the trade the more will be the release of greenhouse gases and therefore more will be the resulting global warming? How is it then that the so-called saviours of the planet who are negotiating the Kyoto Protocol do not see the resulting environmental damage from the increased trade under WTO? After all, trade doesn't happen on bullock carts. It requires burning of fossil fuels to transport tradable commodities across the seas. Similarly, those who are negotiating the controversial WTO agreements do not work out the environmental costs involved. The mere projections of growth figures hides the uncomfortable truth of environmental destruction that the media has deliberately ignored to investigate.

THE CONTRADICTIONS OF IT ALL

One of the major environmental polluters is the automobile industry. This is an accepted fact. And yet, the media goes berserk when automobile giants shift the manufacturing base to India. Behind the hype of foreign direct investment (FDI) and the number of jobs created, what is conveniently



brushed under the carpet is the amount of ground water that is consumed in the process of manufacturing a car. Automobile manufacturing is the worst guzzler of ground water. The media turns a blind eye to the resulting air pollution and its impact on human health. In fact, there is hardly a television channel that has not launched a special programme on the new car models being introduced in the market. When the TV does it, how can the print media be left behind. After all, the car manufacturers have money for advertisements. The difficult task of unravelling the harsh truth of resulting environmental pollution is left to NGOs like the Centre for Science and Environment.

Meanwhile, hunger continues to grow in India, which alone has one-third of the world's estimated 852 million people who go to bed hungry, and that too at times of plenty. In fact, hunger and poverty have proved to be robustly sustainable. Directly related to growing unemployment, reports of gnawing hunger and starvation deaths in Rajasthan, Madhya Pradesh and Orissa hit the national headlines time and again. In 2002, reports of hunger and starvation deaths have also regularly poured in from the country's progressive and economically fast-growing cyberstates—Andhra Pradesh and Karnataka.

At the same time, India continues to make room for exporting surplus foodgrains. That an estimated 320 million people desperately need food, despite more than 60 million tonnes stocked in the open at the turn of this century, had failed to evoke any political expediency. In fact, 17 million tonnes of the surplus food actually meant for the hungry was exported in 2002 at below the poverty line prices. No political leader, including the distinguished nominated members to the Rajya Sabha, even thought of bringing the shameful paradox to the attention of Parliament.

While people die of hunger, the government sits atop a mountain of food grains. In 2001, starvation deaths were reported in over 13 states while the storage facilities of the Food Corporation of India (FCI) were full of grains, some of it rotting and rat-infested. There was a proposal to dump it in the sea, to make storage space for the next crop, when export markets could not be found for this surplus. Such was the quantity of food kept in the open that if each bag was stacked one upon the other, there was no need to launch a scientific expedition to put a man on the moon. You could simply walk to the moon and come back.

The same year, a case was filed by some NGOs in the Supreme Court in India asking for directions to ensure the fundamental right to food of every citizen. A bench comprising Justice B.N. Kripal and Justice K.G. Balakrishnan had directed the government to 'devise a scheme where no person goes hungry when the granaries are full and lots being wasted

due to non-availability of storage space.' To the Attorney General's plea that devising such a scheme would require at least two weeks, the court had allowed for enough time frame. It had also sought affidavits from the state governments of Orissa, Rajasthan, Chattisgarh, Maharashtra, Gujarat and Himachal Pradesh detailing their response to meet the unprecedented situation of 'scarcity among plenty'.

This was in 2001. Two years later, Sumitra Behera had to sell her one-month-old child to feed her other two children. A damming survey conducted sometimes back in Madhya Pradesh, in central India, found 6,785 children in 43 blocks of Shivpuri district severely malnourished—an average of 160 per block. The situation is equally hopeless in other states. Malnutrition continues to multiply, more so among children and women. The extent of malnutrition that exists in the country remains hidden. It doesn't make shocking news. Even hunger makes news only when someone dies.

The best line of defence against hunger and malnutrition is agriculture. I remember soon after assuming office in May 2004, Prime Minister Manmohan Singh had in one of his addresses said that 161 districts were in the hands of naxalites. He had expressed concern at the growing threat from naxalism. In 2008, the number of districts affected by naxalism had exceeded 200. In other words, a third of India is affected by naxalism. And yet, while the chief ministers want tough measures (and obviously more funds) no one wants to understand the root cause of growing naxalism. It is essentially the collapse of agriculture that creates inequalities resulting in the growth of extremism. No wonder, Indian agriculture is faced with its worst-ever crisis, much of it the result of government's own policy of encouraging industrialisation. Large tracts of productive lands throughout the country are being acquired at a frantic pace, leaving agriculture at the mercy of rain gods.

Take Punjab, for instance. More land has been approved for acquisition (for real estate and 'development' projects) in 2007–08 by the Akali government than what has been brought under the urbanisation process in the past 12 years. Construction has already begun or will soon begin on 8,052 acres of land against 7,876 acres urbanised by private developers in the past 12 years.

In Haryana, roughly about 30 per cent of the state is coming under special economic zones. At this frantic pace, agriculture is being deliberately destroyed to pave way for the industry. Not even remotely concerned at the serious socio-economic and political impact the industrialisation policy will leave behind, the fact remains that a majority of the chief ministers have in reality turned property dealers.



Agriculture is at the receiving end. The media however is busy celebrating the emergence of the new millionaires, and the growing middle class. Media is big business now. It is advertisements that control the news content (the trend is picking up in vernacular papers too).

Let us look at the other picture. If the child of a Chief Executive Officer of a big business house is kidnapped, the media goes berserk. Breaking news is flashed 24×7. Media begins its own investigations. For the days the child remains in the hands of the kidnappers, the media gives an impression as if the nation is in grief, ready to cry en masse for the aggrieved parents of the stolen child. The electronic media's social concern evaporates when someone questions that 38 children in one village of Noida (in the outskirts of Delhi, and the same place from where the CEO's son was kidnapped) have gone missing.

On the eve of the New Year 2007, a woman is manhandled outside the gateway to India in Mumbai. A Mumbai daily terms it a national 'disgrace'. Electronic media picks up the story. For days together we are told that the Mumbai incidence was not only a shame, but showed how pervert the lower middle class is. The intellectuals collected for such talk shows join the chorus. But none of them have the courage to question the 'disgrace' the media (both print and electronic) has instead turned into. Every day you open the pages of any daily newspaper and you can count the semi-nude or scantily clad pictures of women flashed throughout. On one such day I counted 62 pictures of semi-clad women in an English daily. Switch on your TV and the chances are you see semi-naked girls gyrating to lousy music.

NO QUESTIONS ASKED

You should not question this disgraceful trend simply because the media thinks it is their right to flash semi-nude pictures of girls and hype the discussion around sex. After all, they have to cater to their business interest, their TRP ratings. But at the same time, the media expects all the readers/viewers to go to Allahabad and take a dip in the Ardh-Kumbh after having seen those titillating pictures and read those sex karma articles. When will someone have the courage to tell the media that the Mumbai 'disgrace' was the direct outcome of the media's obsession with sex and nudity. When will someone tell the media how 'disgraceful' has it become?

There is hardly a day when we don't read about farmers committing suicides. Since 1993, over 1,50,000 farmers have committed suicide. The media does make a passing reference to it. You must have seen small

snippets and reports about farmers committing suicide. The media however has not time to chase this inhuman aspect of 'development'. It chooses to ignore the story simply because the people who are dying are not related to those in the newsroom. They are not part of the 'society' that the media now represents. These farmers belong to what is called in media parlance as 'downmarket'.

Media has of course all the space and courage to take on cases like re-opening the murder of Jessica Lal or Priyadarshani Matoi. I am not saying that the media campaign around these two particular cases shouldn't have been launched. But the media must explain that how come it not only covered the candlelight processions in support of Jessica Lal at the India Gate lawns in New Delhi but also brought the candles to be distributed to those who were pulled up for the procession? Why is a similar campaign not being launched in the media for the farmers who are committing suicides? After all, every hour two farmers are committing suicide somewhere in the country. How many more farmers need to be sacrificed before the media will wake up to its responsibility? The ground realities are far removed from the rhetoric and the statistics that have bred immunity against compassion. We are all part of a global media, which actually perpetuates poverty and deprivation. We make tall claims of feeling good by pushing stark realities of growing poverty and hunger and environmental destruction from the public glare. The media, therefore, in reality, is in a way the cause behind hunger and poverty. Behaving like an ostrich is surely not going to help media flaunt its social credentials. It requires revisiting the ethics and morality that comes associated with being in the media. It requires the people to stand up and question the role the media is playing. Media is no longer the Fourth Estate.



Lost in the Smog

Dionne Bunsha

It was a long, hot journey on a polluted highway along Gujarat's coast. We were travelling with scientists studying sea level rise and coastal erosion in south Gujarat's fishing villages. The young research assistant was eager to explain global warming to us. 'You know, these cars emit ozone, which is a greenhouse gas,' he said. I tried to explain that it was carbon dioxide. But he was adamant. Who can question a scientist?

If this the level of environmental science in India, you can imagine the standards of environmental journalism. Most journalists have to depend on scientific research on matters concerning the environment. But if there isn't much research, where do we turn?

LACK OF SCIENTIFIC RESEARCH

As a journalist, one of the big problems I have faced is the lack of scientific research on environmental problems, particularly climate change. There is a very little research being done, though there are tremendous changes taking place—coastlines are being eroded, glaciers are melting and agriculture is in chaos because of the erratic monsoon. Many of our scientists are disconnected from these ground realities. Ask glaciologists how the retreating glaciers are affecting villages in the mountains and they have no clue. They just hike all the way up the mountain, measure the glacier and leave. There are no linkages between science and how it can gain from and feed into local knowledge.

Whatever little research that is done rarely leaves the confines of our scientific institutions. There is very little effort to communicate the findings and find how the science could be popularised. Most scientific organisations have yet to learn how to communicate through the media.

Since scientists maintain a low profile, to get a quote or a byte for TV the media relies on the 'usual suspects', a small gang of people from conservation organisations in the big cities. These 'experts' will talk with authority on any issue, with not much work to back it up.

A researcher working on the flamingos of Mumbai was talking to the director of the Bombay Natural History Society, one of India's premier conservation groups. The flamingos live in the polluted Sewri bay, where the dirty water produces an abundance of algae, which is flamingo food. But my friend was trying to find research on how the pollution might affect the health of the birds. The director told her, 'Madam, why are you worried? They are having *mazaa* (fun). There is no danger.' This is the state of science and conservation in India. These are the experts that journalists have to rely on for information.

One of the regular columnists writing on conservation in the Indian media is a birdwatcher. This esteemed conservationist has his car painted in a leopard print, and wonders why the animals and birds get agitated when he drives through the forest. Maybe it's his car that is driving the wildlife wild? If this is one of our respected writers, god bless India's environmental journalism!

MORE PROFESSIONAL, BETTER INFORMED

It's time we became more professional and better informed, rather than rely on half-baked experts. Journalists need to develop a strong scientific grounding, so that they can ask the right questions, not just swallow everything fed to them at face value.

Environmental journalism is today a sexy beat, but only as long as it is about stories about cute animals, exotic locales or global warming. If there is anything political that could affect business, it is considered 'activist' or 'anti-development' writing, and immediately stalled. A decade ago, the protests by the Narmada Bachao Andolan against the construction of dams that would displace around 1,50,000 people got media space. Today, the media hardly covers such issues. We are far more callous about human rights. We are far more concerned about business.

When I was an eager-beaver trainee journalist in *The Times of India*, I found ways to beat the system. The *Times* didn't want any stories that they felt did not interest their upmarket advertisers and readers (please note the order of priority). So, I would ravel outside Mumbai on the weekends on my own expense to do stories I felt were important. And then sneak them in on lean days like Sundays and Mondays when they were desperate



to fill the pages with copy. That's how several articles on fishermen protesting against ports or people and forests submerged by dams got published.

Today, I can't imagine being able to do this. It would be far more difficult to sneak stories in. Jingoism about 'Shining India' is at its peak. And the corporate media are its cheerleaders. They believe that economic liberalisation has made India an 'Emerging Tiger', and applaud the biggest, the richest, the loudest. There's a silent censorship of the consequences of this reckless growth.

Journalists are discouraged from exposing the underbelly. As media companies become more corporate, journalism has to take the backseat. It doesn't matter if forests are destroyed or people are made homeless, we are inviting foreign investment to build bigger mines, ports, dams, shopping malls, resorts, special economic zones. The environment and the refugees of this kind of 'development' are losing out to feed the insatiable greed of the elite in Shining India.

The divide keeps widening. People dependent on the ecosystems being destroyed are being swallowed up by the chasm. As my friend Vijay Jawandhia, a farmers' activist in Vidarbha puts it, 'India is turning into Super India. And Bharat is becoming Ethiopia.'

But the media is obsessed with Super India and is yet to realise that we can't eat money. If only it kept track of pollution levels or how many trees are lost everyday with the same fervour that it monitors every rise and fall of the stock market index. If only the media was as insistent that India commit to reducing emissions as it is that we sign a nuclear deal with the US. Those who consume the news know that India's growth rate is the magical 9 per cent, but few of us know that India has two of the 10 most polluted places in the world (Vapi Industrial Estates, Gujarat and Sukinda chromite mines, Orissa).

The term 'environmental journalists' itself reveals how the media treats environmental issues—as a niche. An 'environment' story will be published only if there is space, even though it may have an impact on hundreds of lives. It can be pushed on to the next day/week's issue. Though it affects our existence, environmental news rarely makes it to the headlines.

In fact, almost every news story has an environmental angle, because every human action has an ecological impact. When a new power or tourism policy is announced, who bothers to ask how it will affect people, their natural resources and pollution? It should be the question that immediately comes to mind. Instead, the media will invariably focus on how it will attract foreign investment.

The media is blind to the environmental angle of most news stories. We portray farmers' suicides as a debt crisis. That's mistaking the symptom for the disease. The reason for the killing debt is not highlighted—expensive, unsustainable agriculture. The wanton use of chemicals encouraged during the 'Green Revolution' has destroyed soil fertility and made farming fatally expensive. But we continue down the same path, looking for more loans, stronger chemicals and GM seeds. Ironically, the current chairperson of the National Farmer's Commission is M. S. Swaminathan, the aged father of the 'Green Revolution'. In all the lengthy interviews he has given, no journalist has bothered to ask him any uncomfortable questions about the fallout of his failed prescription.

REACTIVE, NOT PRO-ACTIVE

On environmental issues, the media is generally reactive, not pro-active. Most stories are based on press releases or leads fed by environmental groups. It's not the media, but the various lobbies that set the agenda. And those with the louder roar get more space.

The tiger lobby, based in New Delhi with connections in high places, is higher up in the food chain. That's why most wildlife stories are about the tiger. Media groups even run campaigns to save the tiger. Not a bad cause, but what about the other 49 species in India that are endangered? Who hears about the Red Panda or the Namdapha Flying Squirrel (even more critically endangered than the tiger according to the International Union for Conservation of Nature's Red List)? It's not as sexy as the majestic tiger and doesn't have heavy weights lobbying for it in Delhi's power circuit. And no one questions whether the measures they advocate will actually 'save the tiger'.

Most wildlife groups in India are funded by corporates. It's a quick-fix solution to green your company. Great for the companies. Not so good for wildlife. This means that wildlife groups often play up the 'Man-Animal conflict' as a problem, and never mention the other more serious threats to our ecology. They blame people living in forests or other ecosystems for destroying the habitat for wildlife. The poorest are always the best targets. They can't fight back.

But wildlife organisations steer clear of controversy and keep silent about far greater dangers to the environment and wildlife—mines, dams, roads, ports. It would be seen as 'anti-development' and would anger their corporate funders, many of whom might have some involvement in the projects. It would also annoy the government on whom they rely for



permissions and access to protected areas. And, it raises uncomfortable questions about who are the real culprits? The people living in the ecosystem or the urban elite whose all-consuming consumption demands trigger further environmental destruction.

The media faithfully reflects the opinions of the wildlife lobby, without pausing to think about what remains unsaid. And, it's easier to blame the weaker targets—tribals who have lived in and preserved the forests for ages, rather than the invisible urban omnivores, of which we are a part. That's why the number of articles on the 'Man-Animal Conflict' far outnumber those on how communities are preserving our forests or marine life. We have hundreds of 'sacred groves' across the country where communities have been preserving the forest for centuries far more effectively than the forest department. But we hardly hear about it. Most media reports describe tribals as 'encroachers' into the forest.

Wildlife stories are portrayed as 'out there' in the wild, something that don't directly affect us. Journalists rarely make the linkages between urban consumption and the destruction of 'the wild'. Why? With the restricted time and space constraints of daily journalism, it doesn't occur to most of us to go beyond the story and give a larger context. And such articles would not be encouraged since they go against the *raison d'être* of the media, which is to be a vehicle for advertising, to encourage consumption. At a time when most of our ecosystems are in peril, the media is failing in its role to generate awareness and offer simple solutions on how each individual can make a difference. Thanks to the global climate change craze, we see a lot more environmental stories in the Indian media too. Competition among newspapers has also seen the re-appearance of the 'Science and Environment' page. But most of the climate change or science stories are international stories from the news agencies.

There's very little Indian content. It's probably because there isn't a lot of research in India, but also because newspapers aren't willing to get more journalists to write such content.

Moreover, we are reluctant to raise uncomfortable truths closer to home and deal with the injustices and inequalities that stare us in the face. While India's stand in international climate change negotiations has been to resist any emission limits, arguing that our per capita carbon dioxide emissions (2 tonnes per person) is far less than that of the EU (10.5 tonnes) or US (23 tonnes), India is using this as a justification to 'catch up' with the West and go down the same development path they chose. However, what we rarely hear in the media is what the 2 tonnes per person average disguises the fact that India's richest 1 per cent are

emitting carbon dioxide way almost double the sustainable level, but they are hidden by the low emissions by the bulk of poor Indians. According to a Greenpeace study, the carbon footprint of the four highest income classes earning more than Rs 8,000 per month—150 million people—already exceeds sustainable levels. That's a population the size of Russia and double the population of Egypt living in Shining India, hiding behind starving India. But in all the hype about climate change, the media rarely highlights this stark reality. It would tarnish India's 'shine'.

LITTLE INDEPENDENT INVESTIGATION

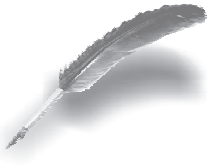
Just like in other fields of Indian journalism, there is very little independent investigation in environmental journalism. The only proactive investigative work is done by environmental groups like Kalpvriksh and the Centre for Science and Environment (CSE), an environmental organisation based in New Delhi that also publishes India's only credible environment magazine called *Down to Earth*. The CSE has done several independent investigations into the levels of pesticide in bottled water, rating the auto industry and the illegal operations of mining companies. Media organisations, though far bigger and flush with funds than the CSE, never undertake such investigations. Nothing that could blemish corporate India will be encouraged.

The scams are quietly swept under the carpet. Of late, the Ministry of Environment and Forests (MOEF) has been reduced to a being a clearing house. One of its main roles is to give the green signal for a project's environmental impact. In 2006, the ministry amended the rules based on which environmental clearance is granted. These rules made it much easier for projects to be cleared. It makes it impossible for a project to be rejected, no matter how adverse the environmental impacts or how strong the public protest. It was basically a red carpet for industry. And, while amending the rules, who else did the ministry consult but industrialists! Lobbies worked hard to get themselves excluded from being subject to an environment impact assessment. As a result, tourism projects are exempt. The government is also trying to dilute the coastal regulation zone notification. Several constructions like high-rises and hotels that were illegally built in the 'no-development zone' perilously close to the coast have been made legal. But you hardly hear of these silent scams in the media, and the scale of damage it could create. Apparently, one tsunami wasn't enough to scare us about the dangers of reckless 'development'.



It's time we went beyond rhetoric. The immense power of the mass media could be used to involve readers and viewers, build campaigns and push public action, rather than pushing consumer products. If not, we might choke on the smog created by Shining India.

12



Tourism and Beyond: Does Environmental Journalism Matter?

Frederick Noronha

We Goans hold that arrogant belief that we were into environmentalism even before that term took root. If this is the case, can the environmental journalist be far behind in India's tiniest state?

I was a latecomer to this field, having joined journalism even while I was finishing college here in 1983. Yet, I took to it with gusto, as it appealed to my common sense and also ideological biases. Environmentalism, and its approach of minimising waste, appeals to the Gandhian that hides in all of us. Its mistrust of corporates, their motives often driven by the single-minded quest for profits, also appeals to the radical leftwing bias that any sensitive young individual can't shrug off in a country where poverty is a reality.

EARLY IN ENVIRONMENTAL ISSUES

But let's begin at the start. Goa claims its first tryst with environmentalism sometime in the mid-1970s.

For the propaganda mill, Goa had just been 'liberated' out of Portuguese colonial rule. Undeniably, this was a development that many here welcomed quite willingly since the earlier regime pandered to a few and kept the masses in a state of deprivation and powerlessness.

But, for the Tatas and the Birlas of India, then the unquestioned kings of Indian capital, this offered new opportunities. Opportunities to build India's first-ever holiday beach luxury resort (the Taj Aguada, which hosted the path-changing 1983 Commonwealth Retreat in Goa and in turn spurred on other tourist ventures here [today the critique of the ills caused by tourism is a subject in itself]) and the Zuari Agro Chemicals,



a fertiliser plant dominating the skyline of the scenic Mormugao-north Salcete coastline alongside the Arabian Sea.

It was the functioning of the highly-subsidised fertiliser-producing Zuari Agro Chemicals that led to Goa's first environmental protests. My schoolday memories go back to reaching the beach one Sunday morning, and being shocked by what we saw. On the sands lay tens of thousands of dead fish, ending up, quite mysteriously, in a manner we had never seen before. In our youthful exuberance, we filled sackfuls of fish and took them home. We thought we would have a feast, but how wrong we were!

It was only later that the full extent of what was happening struck us. The fertiliser plant apparently attempted to cut corners. Their wastes were sent into the sea. This led to the mass mortality of fish here. At the time of the plant's setting up, there had been allegations of politicians siding the project, for questionable reasons.

That was Goa's baptism by fire—or, by dead fish, if you like it—at a time when environmentalism was yet to become a fashionable word.

One thing led to the other. The campaigns over the dead fish led a group of young activists (including Matanhy Saldanha, who went on to become a legislator, and Christopher Fonseca, Goa's most prominent trade union leaders later) to take up other issues.

Leaders like Saldanha and Fonseca rubbed shoulders with fishermen here, and realised that the traditional segment were getting badly squeezed. Trawlerisation, brought about with the support of Scandinavia and fuelled by huge government subsidies (which brought many politicians and their kin into the seas), had been growing speedily in Goa.

MECHANISED TRAWLERS

Mechanised trawlers were brought in here, as into other parts of the Indian coast, with the argument that it would increase the fish catch. This, in turn, was meant to boost the protein intake of the poor. Or so the official promise went. In reality, most of the fish simply got frozen and exported (overseas or to bigger urban markets within India) at prices most couldn't simply afford. An extremely ugly aspect of this business came up a couple of decades later, when shrimp farms were set up, purely for exports, and officials bluntly conceded saying, 'Which local buyer could afford buying shrimp at dollar rates?'

But going back to where we were, in the 1970s, Goa was one of the hot-spots of a bitter coastal Indian protest by traditional fishermen. They were protesting against the invasion of their seas by mechanised trawler vessels. After years of denial, governments today have to admit that the

fishermen were indeed right. The seas are depleted, catches are stagnating (figures of growing catches were just inflated statistics), fish is becoming unaffordable to many, and the poor never got the additional fish they were promised.

Journalists from Mumbai came down to cover Goa's Ramponkar (traditional fishermen) protests, at a time when one was still in high-school.

My own story with environmental journalism began later. But perhaps it was experiences such as these that already got me suitably veered towards entering the field. It just seemed too natural for someone young and idealistic to take the side of the environment. This, as we saw it then and continue to do so now, was after all, a battle against human greed, especially in those crucial years of the 1980s and 1990s. Especially as so much was happening here.

As a journalist who opted to stay on in a 'small town', options were limited about what one could write on from Goa. But not in the world of the environment. Tourism was Goa's big story in the 1980s; it was gratifying to be around to bring on the agenda the green angle of this debate.

To begin with, most were critiquing tourism from the moral perspective, or the fear of the 'dreaded outsider'. It took some more time for a realisation to emerge that the 'smokeless industry' actually had severe environmental impacts.

I remember the night in the mid-1980s at John Fernandes' home in distant Agonda, almost at the very southern end of tiny Goa. John and his entire extended family were traditional, poor tenant toddy-tappers. A large luxury resort had invaded their area of the village, done some deal with local landlords, and was threatening to put paid to the lifestyle they had lived for generations.

One of my perennial regrets will be the fact that I never got down to writing that story. I was raw in journalism, and contributed a column to the *Sunday Mid-Day* then. The sheer vastness and tragedy of the story made it a difficult one to tell. Squeezed for space, in a tabloid rather than a serious-story newspaper, it was a big challenge. That, I'll always remember as one of my big failures when it comes to bringing out 'the story'.

But miracles do happen.

MIRACLES DO HAPPEN

Agonda's project promoters, who claimed to have links with the mightiest in India's political set-up then, were stopped in their tracks. A smart



and pro-people advocate from Margao saw the project bogged down in litigation. Other problems meant that the project could not see the light of day.

Financial troubles came to plague it.

If you visit the spot today, you can see the wonder of the jungle reclaiming itself. Trees and shrubs are growing back, and taking over a place that was to become a concrete jungle; a super-luxury resort that didn't happen in Agonda village of Goa's Canacona taluka (or sub-district).

In Goa, tourism has many environmental angles waiting to be tackled. The waste it generates (ending up on our village hill). Overconsumption. The resource grab. Destruction of greenery. Concretisation of the coast. The destruction of agriculture through competing economics. The pollution of groundwater. Unsustainable population levels along the coast. And a lot more.

Of course, tourism is not the only issue plaguing Goa. Mining is another huge concern. A motely group of green NGOs, around 1987, got together to build Goa's first report to the citizens on the local environment. Together with others like Vidyadhar Gadgil, I volunteered time to edit the version of the report, which however came out in printed form some years later.

But tourism has been a serious concern, specially along coastal Goa where one is located. (Mining, an issue particularly on the boil in 2008 at the time of writing, by contrast, is felt severely in interior Goa, and away from the coast.)

In one particular case, an article one wrote about Goa's first fishing-village-turned-tourist-haunt drew a strange reaction. The title was called 'Calangute, Paradise for Tourists, Stinks for Some Residents'. When published in the print media, it wasn't countered or challenged. But when it made its appearance in cyberspace, coming out right on the top of any search made for 'Calangute' via Google, hoteliers from the region put up an angry response.

They used their clout with a local website—with which, ironically, I was sharing my already-published writing free-of-cost at that point of time. Some hoteliers from Calangute demanded that the article be pulled off the site. It was. But in a little while, one managed to get it published elsewhere—online, and prominently too. Thanks to the Net for helping to fight some cases of censorship, which techies and managers running some websites weren't ready to stand up for.

Prior to that, the North Goa Coastal Hoteliers' Association, based in Calangute, wrote a mail saying they were 'very much shocked' by the

news item on the site, though they were 'your (website's) patrons for the purpose of advertisement'. It is strange how those in the news business sometimes do believe that they are given advertising as a matter of favour.

Said the association: 'It is unbecoming of you to publish such a news item since the said news item has affected the tourist image in entire Goa and in particular the tourism business in North Goa (coastal belt).'

What this article had said was tourism 'is making its pollution impact felt in different ways, and some villagers of Calangute are up in arms over the uncontrolled sewage problem the area is facing.' It pointed to blocks of residential homes converted into 'rent-back' resorts, sewage dumped into storm-water drains, and the close nexus between local politicians and some resorts.

Tourists drawn by the once-prominent charms of this beach village were placing 'severe stress on the environment and local infrastructure'. Incidentally this area was one of the first homes to tourism in Goa, starting after the initial hippy boom in the late 1960s. But in some recent years, tourists from Britain have even got seven-to-ten day off-season holiday packages for a ludicrous price of barely 79 pounds. Believe it or not, this included bed, breakfast and return international air ticket! Such is the ludicrous nature of modern mass tourism.

NOT JUST A FUN SWIM

Villagers who did a study of the area said they had found 48 swimming pools scattered across Calangute-Baga. 'In some villages like Calangute one can find four to five swimming pools within a radius of 200 metres,' villagers had told this writer. Chemicals pumped into each pool could lead to pollution of the groundwater, campaigners had been cautioned.

Incidentally, swimming pools need a number of chemicals—activated carbon and chlorine dioxide for taste and odour control; calcium hypochlorite, chlorine and sodium hypochlorite for disinfection; sodium bicarbonate for the PH adjustment, potassium permanganate for oxidation of impurities; copper sulphate and copper oxide for algae control; and dibutyl tin oxide for algal and fungal control. These were facts the hoteliers just chose to turn a blind eye to.

In the late 1990s, Dr Joe D'Souza and his student Ms. D.V. Gonsalves collected ground water samples. They picked this from wells adjacent to hotel constructions in various locations of the one-time placid fishing village turned tourism-hotspot of Calangute. On analysis for their quality



by conducting physico-chemical and chemical and microbiological analysis, results indicated 'an excessive load of enteric pathogens, thus establishing the non-potability of the water'. Said the scientists, then: 'Unscientific growth of tourism in Calangute has resulted in most hotels releasing effluents into soakpits and drainage systems which are often clogged beyond their capacity.'

Things have certainly not got better with time. Such is the tragic reality behind the picture postcard mask of tourism.

So after years of tracking Goa, and a number of environmental issues, what does one feel about it all?

While it's easy to get despondent as a writer—isn't it easy to ask, 'Have we changed things?'—the fact is that each one of us should not overlook our contribution. Like a drop of water falling on the same spot of a stone, our repeated writing can also make a difference.

We can also influence others, and shape attitudes.

For that matter, it was people of an earlier generation that shaped us too. I recall my first meeting with Anil Agarwal, the founder and visionary behind the Centre for Science and Environment (CSE), *Down to Earth*, etc. We met up at a 'traditional science congress', that used to be held then, and for which I got permission of my then employer (*Deccan Herald*) to attend and cover.

Anil was very encouraging to a greenhorn like me. He remembered my name, he recalled my work—which is very flattering in one's twenties—and had some good words to say. It is people like him who have left behind a trail.

Former resident editor Darryl D'Monte has always been a livewire behind networking people. He has continually kept things going for the green writers' network in India. When he got to know of my initiative in networking green journals through electronic mailing lists, he was quick to support and help build these online networks.

In Goa, it was the early breed of environmentalists—like Dr. Claude Alvares—who inspired a generation of us. It's easy for people like Claude to be despondent about how much of a difference he managed to make after decades of campaigning. But, without doubt, had it not been for contributions like his, things would have been far worse, including the concretisation of the Goa coast.

Claude has also inspired and influenced a whole lot of others. His unexpected and abrupt decision, over a decade ago, to stop writing (except for the rare article) is a loss to both the field of alternative writing and to Claude himself. But their contribution, both to writers and to activists, should not be discounted.



Writing on the environment is soul-satisfying. It may lack the glamour and hype of the world of hard politics, but here you know you're doing something positive to contribute to the long-term interest of society.

The peak of my environmental writing years were in the 1990s. In 1998, one got a chance to attend a three-week training programme in environmental journalism at Kalmar, the coastal town of Sweden. It is held at Fojo, the Swedish journalism training institute, an experience worth recommending.

IMPACT OF LIBERALISATION

What happened since?

As some writers and contributors to this book point out, the economic liberalisation of India had all kinds of consequences on us as a society. One consequence was that green journalism was seen as unwanted.

It started to turn into party-pooper to a country which believed it is to morph into a 21st century superpower, never mind those hundreds of millions still deprived of the basics, and the huge environmental degradation that is mindlessly underway in India. Papers that kept aside space for environmental reporting diverted their newsprint to other priorities—glamour, even sex, and of course the old staple of politics.

Earlier this decade, it struck me that I was getting jaded writing on the same themes. I had focussed my work on largely Goa-related writing since 1983, when I was 19 and just finishing college. It made sense to shift.

Much of my work today focuses on writing on IT (information technology), though with an alternative perspective, and other developmental issues. If a good environmental story comes one's way, you bet I won't give it a miss. My dream is to focus on this issue, critical for all of us, once again, after a while. In the meanwhile, this contribution comes by way of a book dedicated to environmental journalism.

13



Environment Journalism, Maldivian Style

Ahmed Zaki Nafiz

The main aim of this chapter is to give a general view of how the issue of the Maldives' environment is portrayed in the local media and how the Maldivian journalists present environmental issues as hot topics for public debate and discussion. Rather than discussing the issues of Maldivian environment per se, this discussion aims at shedding light on the nature of environment news coverage, its diversity and how journalists in general manage environment news. This being the case, the chapter would help the reader to get a clearer picture on the factors and forces that influence the Maldives' journalists in reporting what they report as environment news and give an understanding on who set the media's environment agenda. The chapter also identifies the main areas that are widely covered and those environment topics that go unreported.

THE BACKGROUND

Environment as a topic of media interest emerged in the mid-1980s. The first media article that was related to global warming was a translation of an article on the existence of a hole above Antarctica. The article's heading 'A Hole in the Sky' headline was more than enough reason for the government to investigate the matter and take a statement from him. He was later warned not to scare people by publishing articles that might generate unwanted public fear. The government's warning to the writer was understandable given the fact it was a time when average Maldivian would find it difficult to believe how a hole could ever exist in the sky. It was also a time when the Maldivian language, Divehi, had no specific word for 'environment'.

The way the Maldivians perceive the environment changed dramatically on 11 April 1987 when the Maldives experienced nationwide tidal swells.

The tide around the capital Male' rose almost to the same height of the island creating panic and a very realistic fear that the island could get submerged underneath the waves. The country's only international airport was also closed because of the huge waves and coral stones that pondered on to the runway. The closure of the airport and the rise of sea level around Male' and around several other outlying islands brought immediate international attention to the issue as well as on the vulnerability of the Maldives. The April 1987 incident was for many an incident that had direct bearing to global warming and its effect on sea-level rise. This incident was widely covered by the Maldives media which by then consisted of the country's only national radio and TV station, both government-owned and two dailies and few magazines that were privately owned.

In July 1987, while marking the Independence Day, President Gayoom in his address to the nation for the first time publicly introduced the issue of global warming and sea-level rise and its potential negative effects on the nation. His warning was that though the country was free and independent, global warming and sea-level rise could not only take the independence and freedom away from its people but also totally wipe out the country's very existence on this planet. This was a very new and sensitive topic for the islanders who in April of the same year had a very real and dangerous encounter with huge waves. For both the local and international media, the President's speech was a great source for producing hundreds of sensational and sensitive stories linking how the island nation could vanish forever, producing a nation of environmental refugees.

By 1989, the Maldives, having taken the issue of environment especially global warming and sea-level rise and its effect on small low-lying island nations to the world attention, became the champion of small-island states by successfully initiating and holding in the country the world's first conference of the small island states on the issue. The conference was a success as it led the way to keep the environmental plight of the small-island states as an important item on the agenda of several international conferences and the United Nations. The Conference was also a vast source of scientific knowledge for the knowledge-hungry news reporters of Maldives to get fully exposed to a high dose of expert knowledge on the issues of global warming and sea-level rise. By end of Small States Conference in November 1989, Maldivians were quite convinced that their national environmental problem was none other than the threats posed by global warming and world sea-level rise.



THE REALITY

There is no doubt that ever since 1987 environmental problems, especially global warming and world sea-level rise, have been the leading topics of discussion in the media of Maldives. However, the unfortunate part was the lack of a local perspective on the issue. The television documentaries were mostly overseas productions and the newspapers published articles that were direct translation of foreign articles. This overdependence of local media on other countries' environmental articles as well as similar articles of global concern was at that time not a cause for concern. The local media was aware that the environmental problems that the country faced were global warming and world sea-level rise, both of which were directly linked to actions of countries other than the Maldives.

There were also other reasons that necessitated the local media to keep covering environmental news in a global perspective. One was the geographic spread of the islands. This made transportation and communication very costly. It meant information gathering was expensive and time-consuming. It also meant that for media organisations operating under very limited budget, covering the local environmental aspects was not economically feasible. Hence, the cost-effective alternative option was translating cheap international stories that contained the desired messages. However, often some reporters did bring a local perspective by adding a bottom paragraph. The added paragraph however lacked facts, figures, quotes and photos. Although the news reporters were aware that their 'bottom footnote' lacked substance, the local readers accepted their reporting style. Given the economic status of the country and the impracticality to cover the local stories due to the financial inability of the news organisations, it was accepted as the best available option.

A second reason was that in the 1980s and in the 1990s, the general news flow in the Maldives media was very much 'managed' by the government. The media was dependent on government press releases and other interviews from official sources for their content generation. There were no private or public institutions other than that of the government agencies that had the expertise. The dependence on the official sources and official media releases was again due to their lack of revenues to create an effective and independent news gathering network.

The third reason was in many ways related to the second reason. Given the fact that the Maldives President Maumoon Abdul Gayoom, having established himself as a world leader who had brought international attention to global warming and the effect of the sea-level rise on the small-island states, having given scores of interviews and speeches on the

subject worldwide, had an abundance of resources gathered over time. His office was active in making available these materials for the local media and they became instant content for publication.

Unfortunately, the President's initial focus was given mainly on topics such as global warming, the increase of carbon dioxide in the atmosphere, greenhouse effects, the depletion of the Antarctic ice, the widening holes in the ozone layer, the cutting down of world rain forests, the eventual sea level rise leading to the vanishing of the Maldives and the Maldivians becoming environmental refugees. However, when President Gayoom brought in to his speeches the topic of the Maldives' island erosion linking it to global warming and sea-level rise, the local media too took this side, focusing on the threats to several Maldivian islands that are being eroded as a result of wave action.

The existence of a managed media that was dependent on official and government sources for information was, as mentioned earlier, due to its financial incapability and inability to gather diverse local content. Environmental journalists were therefore dependent on a government that was active in promoting the environment of Maldives as an agenda whose items were related to global warming, world sea-level rise and other similar issues. The government, being keen to attract as much international attention and sympathy to the environment agenda of Maldives in the manner it had prescribed, was thus successful at the national level too in managing the same agenda.

CURRENT TRENDS IN REPORTING

Although environmental issues in the 1980s and 1990s mainly covered the aspects of global warming and sea-level rise, the nature of environment reporting took some definite new turns in the late 1990s. Furthermore, media organisations too were financially better placed and transport and communication barriers the Maldives had previously faced had eased too. At the same time, there was also an increase in the number of media outlets. The increase in the number of reporters which brought healthy competition among the different media organisations meant there was an added interest among them to cover more diverse local issues.

The new developments certainly had positive effects. The result was an array of new environmental issues. Some of those new issues were: the depletion of underground sweet water from several islands, the stories of dying trees, the need to protect rare trees, the increase in salinity in the soil, the issues of deforestation and the lack of reforestation, the problems



associated with garbage dumped on island beaches, the disappearance of natural beauty of the islands, the lack of properly managed waste dumps and lack of recycling, the need to protect rare species in the sea and on land, the congestion of Male' and how to make the streets of Male' and other islands greener, the importance of safe disposal of sewerage to sea and protecting coral reefs from chemicals and unwanted polythene bags that harmed the corals, bleaching of corals, the need to undertake land-use plans for islands and environmental impact assessment surveys when embarking on major projects, the need to have safe housing policies and building codes, the negative consequences of having to face poor air quality and other associated problems such as noise pollution and lack of beaches, which became the new media agenda.

However, when covering the above issues, there were also quite wide gaps. For example, in reporting the traffic congestion in Male' the capital, the focus is on the inconveniences to the pedestrians, road safety and lack of parking spaces. There is no coverage to identify the emissions from the vehicles or on their effect on the road environment or on the health of the people. The need to introduce a public transportation system to Male' is also a widely discussed angle. Again, focus is given on the benefits of having cheap transport rather than on the benefit of doing away with hundreds of taxis, motorcycles and getting a cleaner environment.

Similarly, when covering the area of building construction, the stories tend to focus on the inconveniences faced by the neighbours who live near the construction site. The issues are therefore about high noise level, vibrations and damage to the neighbouring buildings. There is no in-depth focus given to coverage of local health issues of overcrowding or the disadvantages of having more high-rise buildings on a less than two square kilometre island that already has a population of over hundred thousand people who keep using a 20-year-old sewerage system that has reached almost its capacity.

The same method of reporting follows when important economic areas are covered. For example, when covering fishing news, the stories focus on the increase of fuel costs and rising cost of fish, the need to travel far to catch fish and the need to build better and long range boats. There is either little or no mention of the wastes they throw or the emissions they produce. There are also no reports on the need to re-introduce sails and other innovative and cost effective fishing methods. In covering tourism too, the news reports emphasise the need to build new resorts faster and get them in operation soon so that more money is earned and more jobs



are created. Again, here too, what is not discussed included the waste the new resorts produce, the number of trees they cut and whether they make up for their environmental crimes by replanting the trees they fell or give new habitat to the hundreds of living creatures they, in their construction phase, displace.

When covering the issue of land fill and waste, again the coverage is superficial. For example, in the 1990s when Male' housed its own waste dumps on the beach area, the discussions focused on the smell the waste created and the threat of diseases from the flies living there. However, when a new island, Thilafushi, was created in 1991 in a lagoon using the waste and garbage from Male', the issue of Male' waste was gone from the agenda. However, Thilafushi kept growing by size. It is today a big environment bomb sitting few kilometres from Male' and several tourist resorts. The island has serious issues for concern. For example, a quite serious issue of concern is the safety of this 'Garbage Island' and its health effects on the humans who consume the fish that live and eat from and around the island which also leaches toxic waste to the surrounding sea. There is also a need to protect the island from huge waves and storms or from a tsunami which could destroy the island, polluting the ocean with over 17 years of garbage dumped on it. If this happened, the damage and the destruction that would follow in the island's vicinity and in the neighbouring islands and the surrounding sea would be no smaller than that caused by a huge bomb.

The above are some of the issues that are now very widely discussed and widely overlooked by the local media while covering the Maldives' fragile environment. However, there are some very dedicated journalists who do take the issue of environment to their heart, bringing to the forefront the realities of the current environment status of the Maldives.

A big irony today in covering environment news is that unlike the 1980s or the 1990s, there is hardly an article in the local media highlighting the threats of global warming or on the impact it would have on the Maldives. At least for now, for the local journalists, the idea that the Maldives is a sinking paradise is too far a concept to be a reality. For them, more than any other, it the short-term environmental issues that are the bigger and immediate threat and not global warming or the threat of a sea-level rise which are for the ordinary folks 'parked' as worries of a very distant future which could for now only be realistic at various international fora where politicians debate and map out the future impacts.



THE UNTOUCHED 'AGENDA'

Having discussed some current environmental aspects that are now frequently discussed in the local media, it is also important to take note of several other issues that still haven't made to the media's environment agenda.

One important area the local journalists have not widely written about is the carbon footprints and the Maldives contribution to keep the carbon emissions low. As the country's livelihood is dependent on tourism, the country's journalists cannot afford to campaign actively to bring to a stop the thousands of long haul European flights which bring tourists who have chosen the Maldives as their holiday destination.

A second important area that the environmental journalists have avoided reporting is the negative environmental impact the Maldives' islands face as a result of converting them to tourist resorts. Similarly, there is also no discussion on the imminent slaughter of about 15 islands that are earmarked to build new domestic airports for the convenience of tourists. We all know that the Maldives is barely 800 kilometres in length and less than 200 kilometres wide. There are few islands that are more than a kilometre long and hence there is very less space for any agriculture. The fact is 15 domestic airports mean the loss of vegetation and increase in a lot more carbon emission and the destruction of several habitats leading to the death of several forms of life.

There is also little written about the issue of political interference with environment. For example, there are many cases where influential businessmen have developed tourist resorts giving lip service to the existing rules, regulations and environment laws. Some have dredged entire islands and removed sand while others have reclaimed and added land to their resorts by filling the island lagoon, thereby killing all the fish and other living organisms in the entire area. There are also those who use their political and financial power to cut trees from inhabited islands without giving any due consideration to the laws of the land and to inhabitants of the islands.

Although the Maldives has abundant sun and hence solar energy and islands are surrounded by sea and have waves as well as good breeze, the country is entirely dependent on fossil fuel for its energy needs and this keeps the economy going, especially in the areas where tourism and fishing are dominant. The rising fuel cost is also a national issue. The sensationalism that goes with the sensitivity of the issue is extensively



covered. What has not been brought to the limelight is the work being done to develop sustainable and renewable energy, the updates about any ongoing efforts to develop wave, wind or solar energy. As of now, there are also no media reports or discussions on the need to practice energy conservation in all walks of life.

Maldives was also one of the first to sign the Kyoto Protocol. However, most islanders still don't know what Kyoto Protocol means for the country and for them, let alone where in the world is Kyoto! The journalists also do not write about the local responsibilities that the Maldives is obliged to undertake under the Kyoto Protocol. The media has not pressured the government or made any effort either to expose or to make the government publicly accountable if it has not met any targets under the Kyoto Protocol.

CONCLUSION

From the above discussion, what is noteworthy is that the Maldivian media has for most of the time covered the effects of global warming and the threats of a sea-level rise through a carefully managed governmental media agenda fulfilling the government's objectives. When covering other local environment issues, although several issues have been brought to limelight, the coverage is superficial and some sides are overlooked or untouched for an array of reasons of which some are personal, while others political and economic. In many cases, the follow-ups disappear too soon and the incident is too soon removed from the agenda of the media. In many instances, there is not enough fair reporting of the hard realities of the harm that is being caused to the vulnerable environment of the country.

If the current trend of giving superficial coverage to deep-rooted environment issues continues, the country's image as a chain of green jades embedded in the pristine blue ocean may be lost for ever. Indeed, much quicker than through global warming or due to a world sea-level rise, the Maldives could be a paradise lost sooner than anticipated. Hence, the images of an island, small, beautiful, green and rich with nature's bounty, which Maldivians cherish and keep very dear to their heart, may be gone for ever. But, with collective effort, the environment journalists can bring about a change towards a greener Maldives, keeping it safe and secure for a life that is beyond the life of our immediate generations.



AN INTERESTING FOOTNOTE

One more note: In the Maldives, in the late 1980s, just at the same time as some south Asian countries were forming fora of environment writers/journalists, some Maldivian writers on environment, in association with the government's environment and information department, did form a similar forum. The forum was thus from the very outset a body that was under tight control of the government and the members did not have full independence.

Unfortunately, despite the Maldives being world famous at that time as a sinking paradise due to global warming and sea-level rise, the association was never successful in becoming an environmental lobby of writers campaigning for the protection as well as bringing to the public eye the status of the country's environment.

As international fund was by then available, some of the forum's writers managed to travel to other south Asian countries to attend conferences. Their presence was thus known internationally and regionally. However, within the Maldives, except for the government agencies concerned and the forum members, no one knew about their activities or even of their very existence.

The forum has never organised national campaigns, seminars or national environmental activities that would show its presence. I am not sure whether the forum still exists today. What I know is the forum's members never grew and we never witnessed any of its activities during the last entire decade. Even if it did undertake some activities, these were inconsequential. In my view one reason the forum did not 'take off' was because rather than a forum of environment writers, it acted as a body that had a very close association with the government and hence was pretty detached from the media.

This happened also because the main person who initially led the forum was also one of the heads of the Environment Ministry who, though was once a very prolific writer/reporter, after he become one of the senior heads of a government department, his behaviour and attitude, especially in dealing with reporters, was not welcomed. As a result, he became detached and isolated from the local media. Hence the forum found it difficult to bring out all the desired writings through the media. Added to this was the fact that most of the active journalists of that time who did not want to get associated with him also avoided becoming members of the forum.



Uphill and Downstream in Pakistan

Beena Sarwar

MAINSTREAMING ENVIRONMENT

It was Saneeya who first introduced me and many Pakistani journalists to the concept of ‘environmental journalism’. She had been my editor at the *Star Weekend*, the magazine section of Karachi’s daily evening *The Star* and, fed up of ‘the red scribbles from upstairs’, left in early 1988 to join the communication unit of the Karachi office of the International Union for Conservation of Nature (IUCN), the World Conservation Union.¹ Those were the Zia years,² and writers of a progressive, liberal bent were often banned. We’d smuggle them on the pages under pseudonyms (some had several reincarnations) until the powers-that-be discovered their identities and booted them out again. Politics, journalism and gender were interlinked in a way that was peculiar to Pakistan in those war-on-communism-through-jihad years when the Zia regime was promoting the green flag of radical Islam to drive the red Russian bear out of Afghanistan.

What does environmental journalism have to do with the Afghan ‘jihad’? There may not be a direct link, but between them America and Pakistan (with Saudi Arabia and a few others) had turned a nationalist war of liberation into a religious crusade, and this permeated everything in Pakistan—particularly journalism and gender, which environmental journalism bridged. Women were at the forefront of resistance to the military regime and its efforts to push women back into ‘*chadar aur chardewari*’³ through a conservative, retrogressive media policy and a series of discriminatory laws. Many women activists were also at the forefront of efforts to bring the environment into focus in Pakistan. Along with Zohra Yusuf, our Editor at the *Star Weekend* until she was ‘kicked upstairs’ as she put it (into a non-editorial, management position) Saneeya Hussain was a



member of the Shirkat Gah Collective, a women's resource centre which catalysed the Women's Action Forum, the umbrella group of women's rights groups and activists that so fiercely resisted the Zia regime. They were among the first Pakistanis to participate in people-to-people contact with environmentalists in India, despite the official hostility between the two countries.

When Saneeya joined IUCN, she set up the pioneering Journalists Resource Centre that trained and encouraged journalists in environmental reporting.⁴ As Ismail Khan, a young Skardu-born⁵ journalist put it, 'Never before had a systemic process been set in motion to sensitise media on environment and development; more so, never before had an attempt been made to unleash potential of the media to trigger policy reform, institution building and engineer socio-political commitment for a cause.'⁶

Ismail was among the many journalists Saneeya deeply impacted, although he met her for the first time much later, after having contributed a chapter to *Environment for All* (Saneeya's last publication as Executive Director of Panos South Asia) and taken on her old job at IUCN's communication department. He first heard of her not because of Panos or IUCN but

from senior broadcasters in remote radio stations at Skardu, Gilgit, Khuzdar, Multan and Quetta. Every media workshop or training I poked my nose into I ended up learning a little more about the charm and genius of Saneeya and how she went about diverting media attention from the politics of power to the politics of environment and the people.

In Saneeya's time, IUCN was energised by the new environmental paradigms emanating from the 1992 Earth Summit at Rio de Janeiro. The IUCN was the driving force behind the formation of Pakistan's visionary National Conservation Strategy (NCS), for which the first roundtable workshop was held in August 1986 long before the government came on board when it approved the NCS on 1 March 1992. Over 3,000 people were involved in discussing the NCS process and policy which was significant for several reasons, as Dhunmai Cowasjee who then worked at IUCN explains.

Firstly, NCS provided a space for public dialogue. Secondly, it was the first time that a federal level policy involved the provincial and council levels (the Local Government Ordinance was promulgated in 2002). Third, the NCS mainstreamed environment, incorporating not just wildlife and parks

but providing an in-depth analysis of what makes Pakistan tick, with a Rs 16 billion outlay. And not least, it acknowledged women as users of natural resources and provided a holistic education on interlinked issues.⁷

Saneeya, as part of the NCS communication team, involved journalists in these consultations. Environment was still a new area and concept in Pakistan. Even more novel, notes Ismail, 'was the idea of forging linkages of environmental policy and practice with media'.

Saneeya forged such linkages not just through consultations and trainings but also through the IUCN's path-breaking quarterly NCS Bulletin (later the *The Way Ahead* magazine) that she edited and its Urdu counterpart, *Jareeda*, edited by the prominent writer Obaidullah Baig. These were the first publications in Pakistan devoted to the environment. Aware that editors did not set too much store by 'boring' environmental stories, Saneeya devised a way around their reluctance. She taught us that 'environment' doesn't have to be spelt b-o-r-i-n-g. On the contrary, there is usually a solid political or economic angle involving juicy corruption as mill owners, builders and industrials try to cut corners, endangering fragile ecologies and people's health. She convinced reporters to explore such investigative stories and paid them well to do these stories—a welcome incentive in the days when journalists were not as well paid as today. This allowed them to take time off from regular beats and produce reports that Saneeya edited and used as cover stories for the NCS Bulletin/*The Way Ahead*. The reporters' newspaper or magazine could then re-print it, crediting IUCN.

Saneeya pushed me to report for her magazine when I was Features Editor at *The Frontier Post*, recently launched from Lahore. When I muttered something about not having time, she suggested involving colleagues. I roped in Ejaz Haider from the reporting section and Ayesha Haroon from features. Over the next month or so we tackled the issue of the noxious 'Degh Nullah'. Several factories along this stream just outside Lahore were dumping untreated effluents into it, killing off fish and polluting groundwater, causing digestive and skin diseases among the poor villagers living nearby. Investigating and exposing the corruption behind the dumping was a learning experience for us. Unfortunately, one of the lessons we learnt was that our explosive story was not going to change the world. Our story had a limited impact and that too not for long. But the struggle had to continue.


Many of the young reporters whom Saneeya commissioned in those years are now big names. To mention just a few: Ayesha Haroon is Editor of *The News*, Lahore; Ejaz Haider is Executive Editor of *The Daily Times* and



Consulting Editor at *The Friday Times*; Azhar Abbas, who did a report on toxic waste for Saneeya, heads Dawn News TV; Owais Tohid who investigated air pollution in Rawalpindi heads Geo TV's newly launched English language channel. I have edited a major weekly paper,⁸ done a Masters in Television Documentary, worked for television and returned to academia before going freelance. All of us have come a long way since Saneeya coaxed us into doing stories we may not otherwise have focused on. Thanks to the way Saneeya had showed us, at *The News on Sunday* we ensured that our reporters had the resources and time to take up investigative stories related to the environment. They regularly initiated ideas, some quite groundbreaking. Khalid Hussain took up issues related to water and pesticides. Farjad Nabi and Mazhar Zaidi embarked on a trek along the Indus to do a series on the conditions faced by the indigenous Mohannas, boat-people of the river. Nadeem Iqbal tenaciously pursued concerns about the Chinese-built Chashma power plant's compliance with the country environmental laws, particularly environment impact assessment. There were fears about the plant's location at the banks of river Indus because of which any accident would cripple the country's irrigation system. This pursuit resulted in the director general of the environment protection agency being made an ex-officio member of the safety regulatory agency—the campaign was fully supported by 'our man in Islamabad' Omar Asghar Khan, who was briefly minister for environment.⁹

There are also many passionate environment advocates among lawyers, hunters and of course travel writers like the energetic Salman Rashid (who started out writing travel pieces at the *Star* and also became a close personal friend of Saneeya's). Environmental discourse has made its way into the columns of prominent writers in op-ed pages of national newspapers. These include visionaries like Isa Daudpota, another of Saneeya's friends and comrades-in-arms on the environmental crusades. He shrugs off the description with a typically terse, 'I am hardly a crusader. It is common-sensical to shout about environmental destruction.'

Although not strictly a journalist, Isa has written several well-researched articles on environmental issues, most recently the controversial New Murree development in forests of the Murree Hills not far from the capital Islamabad. He and like-minded individuals have kept the issue on the public radar by consistently writing about it. Isa's most important contribution is probably his tenacious highlighting of the poor performance of Islamabad's municipality, Capital Development Authority, focusing recently on the Centaurus, a seven-star hotel and apartment complex 'that will destroy the character of the city only to provide a pleasure palace for the filthy rich'.



The issue of land use—large tracts of ecologically fragile land being given over to development mostly for rich people’s housing colonies or recreation—is often not considered part of environmental journalism. Such development projects are also supposed to submit to environment impact assessments, which they often get around by paying huge bribes. The media explosion in Pakistan has resulted in more space for addressing such issues even if they are not approached from an environmental reporting angle. It makes an impact on the public consciousness when comedy shows in the relatively new television channels pick up environmental issues. For example, Pakistan’s first English-language television channel, Dawn News, did a take-off on the Centaurus project in their series ‘The Real News’, satirising television news. The skit features an anchor talking to a correspondent reporting from the project location. There’s not very much about the environment on it, but it does focus attention to a project that has been slammed for its potential environmental hazards (posted on YouTube, 25 March 2008, available at <http://tinyurl.com/6s57kz>)

THREE SHOOTING STARS

Even before the IUCN environmental reporting trainings in the 1980s and 1990s contributed to the heightened awareness about the issue, there was already at least one journalist who already focused on the environment with passion and commitment. Ameneh Azam Ali was senior assistant editor at monthly *The Herald*¹⁰ down the corridor from the *Star* when I was an intern there—both publications were part of the Dawn Group.¹¹ I was in awe of her because she was so confident, serious and intense, and wrote so well. During the mid-1980s, Ameneh was Pakistan’s foremost ‘environmental journalist’ even before the term was popularised here.

Architect and town planner Arif Hasan who worked closely with her on several projects recalls her interest in the environment starting during 1983–84, catalysed by the devastation caused by salinity and water-logging to which he and his colleague Ghulam Kibria were trying to find local solutions. She moved on to study forests and was among the delegates sent by Shirkat Gah to study the Chipko movement of the Himalayas in 1988¹²—the ‘Chipko tree hugging sessions’, as Ameneh’s close friend and colleague from the *Herald*, Talat Aslam (now Editor, *The News*, Karachi) put it. Ameneh was much influenced by her exposure to India’s environmental activism particularly the pioneering work of environmentalists like Anil Agarwal who had just launched the environmental magazine *Down to Earth* with its useful handbook for journalists.

Such linkages led to the first joint India–Pakistan Conference on the Environment in Pakistan, organised by IUCN Pakistan along with India’s Centre for Science and Environment. Several Pakistani and Indian NGOs, government and the media participated in this first such exchange, which aimed at regular collaboration between the two countries on environmental issues. Ongoing tensions between Pakistan and India prevented this from happening with any regularity, but some follow-ups did take place, like a month-long video training regional workshop in Bangalore in August 1989 for women in development organisations working on community issues and a similar workshop in Lahore later, conducted by the Indian trainers.

Talat Aslam remembers meeting Ameneh for the first time in 1984 when he joined the *Herald*, also as senior assistant editor. Brought up in London, she had come back to Pakistan a couple of years earlier, and was in what he calls her ‘angrez-discovering-Pakistan’ phase. Talat had also studied in London, and was drawn by her no-nonsense, straightforward and serious approach. Their close friendship and intellectual bond survived Ameneh’s departure from the *Herald* in 1988 to join the newly set up Agha Khan Rural Support Programme (AKRSP), doing research, contributing to scholarly journals (including *Sage*) as well as the *Herald*. Ameneh was at the peak of her youth and career in 1993, when cancer claimed her life, leaving a void in the field that has never quite been filled.

In 1992, another promising young reporter distinguished herself at the environmental beat of *The News*, Karachi when the paper was launched. Zulekha Ali made a name for herself in environmental journalism in a short career that spanned barely a year. In August 1993, she died while trying to save her friend Fizza who had jumped into the sea after a little girl who had fallen at a rocky Karachi beach. Both strong swimmers, they managed to save the child but lost their own lives in the process. Ironically, Zulekha had only recently highlighted the illegal sand excavations and inadequate beach safety because of which a dozen people had drowned at a similar beach during the festival of Eid.

In 1994 the UN Environment Programme (UNEP) posthumously named her its Youth Award Winner for her series of investigative environmental stories. The citation on the UNEP website notes:

Almost everything she wrote triggered action because she followed up. Last July, the local town committee decided to turn the only children’s park in the area into a maternity home, despite the fact that there were already several homes there. Zulekha did a story on the conversion mobilising the

community who took the matter to court. A stay order was obtained and the park was saved.

...Last May, a lethal chemical used in the dyeing industry was dumped along Lyari River, causing the death of two people. Zulekha followed the trial of the chemical and discovered that about 1,460 drums of the same chemical were lying in the customs warehouse. Zulekha's investigation revealed that a large number of chemicals were still dumped. This report resulted in the involvement of environmental agencies and thanks to her efforts toxic chemicals are not treated in the same passive way.

It is a strange coincidence that yet another woman who had a huge impact on environmental journalism in Pakistan also died before her time. Saneeya Hussain's contribution to this field is measured not by the stories she wrote as much as by the trainings she initiated and the stories she commissioned, not just at IUCN but also at the World Commission on Dams that she joined in 1998. The three-year Commission based in South Africa developed a new paradigm for decision-makers to resolve issues related to economic growth, social equity, conservation and people's involvement. Saneeya made a significant contribution in communicating the new framework to the public through the media. In 2002, she joined Panos South Asia as Executive Director but had to leave two years later as the Kathmandu-based job with its accompanying pollution proved disastrous for her asthma. She moved to Sao Paulo, Brazil with her husband, Luis Paulo Ferraz. Barely a year later, she suffered what appeared to be a severe asthma attack. Although Saneeya was able to walk to the car, by the time Luis got her to the hospital, impeded by heavy traffic, she was unconscious, unable to breathe, her brain deprived of oxygen. It had taken them twenty minutes to cover the two kilometres. Saneeya died on April 20, as friends around the world kept vigil. As Luis said later, it was not asthma but a traffic jam that killed Saneeya. 'Ironically, it was the urban nightmare that we have collectively created that finally snatched her away at the prime of her career,' commented our mutual friend, the Sri Lankan journalist Nalaka Gunawardene, writing on his blog on the second anniversary of Saneeya's death.

Similar tragic scenarios unfold on South Asia's mean streets every day. Heart and stroke patients fail to reach help in time. Ambulances and fire engines, with their sirens blaring, only manage to proceed at a snail's pace. It's not uncommon for expectant mothers in labour to give birth on their way to hospitals. Then there is the slow, insidious poisoning that goes on 24/7.



FOLLOWING THE PROCESS

Newspapers and radio and television channels do of course continue to highlight such issues. But more often than not, the focus is on the outcome (child killed and another loses limbs because of toxic waste at the rubbish heap they were playing in) or event (building, bridge or road being built that will cause environmental damage). The ongoing process of environmental destruction rarely gets the same attention.

An ongoing system of trainings for journalists is obviously also essential. Non-government organisations like IUCN, Panos, WWF, the Pakistan Press Foundation, and educational institutions like Peshawar University with its forward-looking media and communications department do conduct or facilitate such trainings. Most journalists who have participated in such trainings tend to eventually move on to other exciting and glamorous areas like politics or crime. One reporter who has deliberately resisted this trend is the unassuming Bhagwandas, now a senior reporter the daily *Dawn* in Karachi who has been on the environment, development and related beats for over two decades now.

I first encountered Bhagwan in 1991 as part of a group of journalists that Omar Asghar Khan and his Sungi Development Foundation had invited to Haripur in the NWFP to focus on the damage caused by the timber mafia's widescale logging and subsequent land erosion. The trip included field visits and interviews with locals as well as a workshop to analyse and discuss the issues involved. We were also later together at Ghazi-Barotha downstream from the Tarbela Dam where a proposed barrage threatened to drown ancestral graveyards. Omar was involved in organising this trip too, in collaboration with Saneeya at IUCN. The resulting media attention forced the planners to (slightly) modify the original plan to incorporate at least some local concerns. Such trips highlight the co-dependence of environmental journalists and non-governmental organisations. It's a mutually beneficial relationship—the NGOs need the exposure that their journalist partners bring, and the journalists need the information and data. The media trainings are an additional bonus.

One of Bhagwan's early successes was in 1990, when his reporting contributing to saving the Kirthar National Park, home of rare and endangered Sindh Ibex for whose protection it was declared a national park. The government had started work on the Indus Highway connecting Karachi with Peshawar, a portion of which was to pass through the Park. The vehicular traffic would have destroyed the area's sensitive ecology and disrupted wildlife, besides giving easy access to poachers, recalls Bhagwan.

I broke the news and pursued it till the issue ended. Initially nothing moved, but eventually it gained momentum. First the Japanese government suspended their funding for the project and eventually the highway was re-routed to skirt the park, and it was saved. The population of Sindh Ibbex which was small at that time, has also reached at a stable level over the years.

Bhagwan was further rewarded by a certificate presented to him by World Wide Fund (WWF) International President, Prince Philip, the Duke of Edinburgh, during a visit to Pakistan shortly afterwards.

Pakistan's environmental crusaders got a huge uplift after the Earth Summit in Rio de Janeiro in 1992 which stated that 'the only way to have long term economic progress is to link it with environmental protection'. The Summit led to governments, including Pakistan, making certain commitments regarding environmental protection acts and quality standards. Saneeya, of course, was at Rio for the Summit. All the discourse about the environment contributed to the launch, on World Environment Day, June 5, 1992 of the Green Press Forum, spearheaded by Zaffarullah Khan, then bureau chief of The Frontier Post, Islamabad. Other journalists associated with the Green Press have included Mudassar Rizvi, Tracey Wagner-Rizvi, Nadeem Iqbal, Nasir Iqbal, Faraz Hashmi, Masroor Gilani, Mazhar Zaidi and Zaigham Khan from various English language publications and Abrar Mustafa and Irfan Dar from the Urdu media. 'Green journalism' has more adherents among the English language media which tends to have a more sophisticated approach, but environment is something that affects everyone and the local language media (particularly the Sindh press and more recently, the new independent television channels) have been vocal in taking on issues that affect their constituents, like water logging and salinity, problems facing fisherfolk due to pollution and the erosion of the mangroves, or toxic waste dumping.

Environment became a proper 'beat' in the 1990s after environment protection agencies (EPAs) were set up in all four provinces, headed by a federal environment protection agency in Islamabad. The government started to involve the media, placing advertisements in newspapers and on television, and giving regular briefings to journalists in order to disseminate information and awareness about the National Environmental Quality Standards (NEQS)¹³ that were established in 1993 (after the Earth Summit), and the new environment impact examinations and assessments that were being made mandatory before any new industry or development complex could be set up. Asif Shuja Khan, Director General EPA, believes that the media's involvement and support was 'crucial' in the unanimous

passage of the Environment Protection Act 1993 as a Bill in 1997 by the National Parliament and the Upper House despite opposition from the industrialists. The Agency continues to involve 'green journalists' at EIA public hearings and through workshops at the provincial and federal levels.

However, the political chaos of the past few years and imperatives like 'security' have, as Khan puts it, 'overshadowed the environment'. The Green Press Forum also seems to have become a casualty to this neglect, as the last time its website was updated was in the year 2000. Most of the pioneering journalists involved in the initiative have moved on to areas like development, governance, civic education. As one of them put it, 'You don't get promotions for environmental journalism, but for political journalism.' Given this reality, there are few committed 'environmental journalists' in Pakistan. All too often, it is a handful of individuals like Isa Daudpota who take on an environmental issue and doggedly keep it in the limelight. The good news is that environmental journalism has moved out of the box it occupied during the 1990s, and now permeates several issues ranging from development, governance, globalisation and civic rights and education to politics, economy and health.

Sometimes, these individuals are not journalists, but lawyers or activists who take on causes and rope journalists in, like Haris Gazdar at the Collective for Social Science Research. Toxic dumping in the SITE area had resulted in one child's death, the amputation of another child's limbs, and severe burns to other children in early 2006. Some CSSR workers came across the case and put together a report on the issue. They got advocate Faisal Siddiqi to take on the children's case pro bono, and actively pushed journalists to cover the issue. After two years of litigation the families won the case—a first in Pakistan's environmental history. The case highlighted the impact of the media which 'created a narrative of public importance', as Faisal put it.

The judges knew about it which gave us a receptive ground to plead the case. The narrative continued to be constantly developed and remained in the public eye. There was aggressive moral shaming. Last but not least, the case mobilised the people – victims, families, supporters were all engaged in the struggle and formed an NGO to take the matter forward.

The case also resulted in getting the factory closed down, compensation to the victims' families, and the stoppage of toxic dumping in the area.

Relatively new buzz words related to the environment over the last few years have cropped up—disaster management and climate change,

catalysed by the South-East Asian Tsunami of 2004 and the earthquake that devastated Kashmir and northern Pakistan in 2005 (followed a couple of months later by Hurricane Katrina on south-eastern USA). The protective role of trees on mountain sides and of mangroves along the coast that journalists and NGOs have been shouting about for years, suddenly took on a new importance in the eyes of policy makers (we hope).

Mountain areas have long been endangered by skewed 'development' projects, widespread logging and erosion. In 1998, Kunda Dixit, who set up Panos South Asia in Kathmandu, commissioned a series of reports from for 'Tough Terrain: Media Reports on Mountain Issues'.¹⁴ The Pakistan contribution was 'Landsliding Away', a chapter in which Nadeem Iqbal and I focused on the problems caused by development work that ignores the fragile ecology of mountains. Poorly designed, badly constructed mountain roads resulted in landslides in 1998 destroying the homes of over 2,000 people in eight villages of Hazara. The villain of the piece, ironically, was a farm-to-market road connecting Balakot to Hangaree, 'one of the several Asian Development Bank funded projects meant to make life better for rural dwellers. But mismanagement and insensitivity to environment and people has had the opposite effect'.

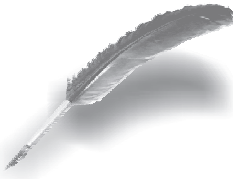
Nadeem later did a follow up for *Newsline's* July 1999 issue as a result of which the ADB sent an environment expert to investigate the issue. He found that Nadeem had mentioned only three roads, while the environment laws were violated in nine other roads. Later, the Environment Protection Agency, NWFP, was forced to carry out an environment impact assessment of the ADB funded road-to-market project. Tragically, the October 2005 earthquake in Kashmir wiped out both Balokot and the road which connected it to Hangaree.

The devastation and loss of lives might have been mitigated had environmentally-friendly policies been followed in the area. Saneeya, Ameneh and Zulekha, and of course Omar, watching the devastation from another world, must have felt the pain.

NOTES

1. World Conservation Union Pakistan—see www.iucnp.org for useful publications and archived material.
2. Gen. Ziaul Haq took over power in a military coup of 1977, overthrowing the elected Prime Minister Zulfikar Ali Bhutto.
3. A slogan used liberally at that time. Literal meaning: the 'veil and the four walls'.
4. The IUCN, spearheaded by the formidably competent Aban Marker Kabraji (a member of the Shirkat Gah Collective) also set up Pakistan's Forum of Environmental Journalists

- (FEJ) which grew provincial branches with time although it never had much public visibility.
5. Skardu is situated at nearly 8,200 feet in Pakistan's Northern Areas near the China border about 110 km east of the famed Karakoram Highway that traverses the Karakoram mountain range. It is here that the Indus River receives the Shigar River waters. Skardu is also just across the border from Kargil, where India and Pakistan fought a war in 1999 which came perilously close to escalating into a nuclear disaster.
 6. M. Ismail Khan, 'A leader and a rebel', *The News* op-ed, 12 May 2005, available at <http://www.jang.com.pk/thenews/may2005-daily/12-05-2005/oped/o2.htm>
 7. For a complete history, see David Runnalls, 'The Story of Pakistan's NCS: An Analysis of its Evolution', IUCN, Pakistan, 1995, available at http://www.iucn.pk/publications/tstory_pak_ncs.pdf
 8. *The News on Sunday*, originally *The News on Friday* (until Nawaz Sharif in his first stint as prime minister restored Sunday as the weekly holiday, undoing one of Z. A. Bhutto's early moves to appease the mullahs).
 9. Omar's death on 25 June 2002 was a huge blow to the environment and peace lobbies. His family and friends believe that he was murdered and it was made to look like a suicide which no one who knew him can believe. He had recently resigned as the Federal Minister for Environment, Labour and Manpower and was setting up a new political party in preparation for the October 2002 General Elections.
 10. *The Herald* was then edited by the legendary Razia Bhatti who later started a new monthly magazine, *Newsline*, along with some colleagues as an independent cooperative.
 11. *The Star* was closed down in 2005. Saneeya had earlier written of the decline that preceded this shutdown soon after the 1980s. 'Some say it was because the one clear target/enemy of the paper, President General Zia-ul-Haq, had disappeared—in Imran Aslam's famous words, to rest in pieces all over Multan—that *The Star* lost its focus and bite. In actual fact, though, it was the loss of the best contributors to the *Star Weekend* that led to the magazine's demise.' ('Star Trekker', in *Pakistan: An Age of Violence*, ed. Anita D. Nasar, Sampark: London, 2004).
 12. Other delegation members included members of the Skirkat Gah Collective Aban Marker, Khawar Mumtaz, and Kauser Said Khan. Another Collective member is the senior journalist Najma Sadeque who has written extensively on environment, development and globalisation.
 13. NEQS define maximum allowable concentrations for pollutants in municipal and liquid industrial effluents, industrial gaseous emissions, motor vehicle exhaust and noise.
 14. Edited by Kunda Dixit, Aruni John and Bhim Subba for Panos South Asia and Asia Pacific Mountain Network, 1998. Incidentally, Kunda also authored a book which I think is mandatory reading for all journalists, *Dateline Earth: Journalism as if the Planet Mattered*, Inter Press Service, Asia Pacific, 1997.



SECTION TWO
Science, Health and
the Environment

15



Good Science, Environment Journalism and the Barriers to It!

Pallava Bagla

Taking the news out to where it belongs—among the people, the readers, the viewers—is what journalism is all about, and I can almost hear a tired sigh saying, ‘Hey, we’ve heard that one before.’ But I say this because ever so often, it is the negative happenings, the aberrations, the stuff that goes wrong in the world that make the best news. Well, that is journalism for you, and while I can recount scores of positive stories across the world, the point is, negative happenings stick—to memory, to newspapers, to angry letters to the editor.

This same thumb rule of journalism applies to science writing, for after all, journalism is journalism. The rules of good reporting remain almost the same across disciplines, and the good story is—nine times out of ten—defined by deviation from the norm. A lot of environment journalism should actually be rooted in science, but unfortunately a lot of environment reporting is more on the lines of issue based writing, often times bordering on activist journalism which in a way has been the bane of this genre of environment writing.

Hence, somewhere, science journalism is different, very different. If a science journalist has a good grounding in science—a thorough specialised education, an advanced degree, or even work experience—he or she would stand many heads above the rest. That is the story which will stand out among the many mediocre ones, and all for one simple reason—at the centre of science is fact, and it is this eternal search for the fact that engenders great science.

Again, science communication is only mildly different from mainstream journalism since most of the times we professional science writers are looking at stories emerging out of published sources. This is not to say that science journalists don’t report a breaking news story.



WHAT INDIA OFFERS

I have been an environment and science photojournalist now for 18 years.

I now work for the AAAS magazine *Science* as their Correspondent, a position they created after I started reporting for them in 1994. I took on the role of being Science Editor for New Delhi Television some time back. In addition I am a still photographer for Corbis, one of the world's largest news photo agencies.

I bring with me what many have dubbed as a 'very unique perspective' for one there are not many science writers who are also accomplished photographers. In addition, since I write on one hand for a low budget national outlets catering to the lay audience of a developing country, to the reasonably high budget magazines catering to a hugely multinational global audience. So if you bear with me, I will try and share my limited experiences, which actually straddles both the developed and developing worlds so to say.

India presents a fertile ground for a science reporter.

I'd like to quickly take you through some facts and figures that reveal an exciting situation for science journalists in a country like India. The figures that follow only underscore the manner in which science has been central to modern governance in India.

According to some estimates India today possesses possibly the third largest pool of research and development (R&D) personnel in the world with an annual investment of US\$ 5 billion. Not bad for a country teeming with so much poverty and unemployment.

The government puts in two thirds of the money and the private sector spends only about a third of this money. This is in sharp contrast to the way science and technology (S&T) investments are made in the West, where the ratio is almost the other way round. This ratio has an immense bearing on where and how a science reporter apportion his time in the course of his work, so more on this later.

Today, India's R&D spending is pegged at a little less than 1 per cent of the GDP but the government wants to take it to about 2 per cent of the GDP in the next 5 years, which would mean a huge inflow of funds for this sector. This should be music to the ears of a science communicator as his core sector is in for major upsurge.

But the music can only be short lived since a giant chunk of the R&D investment in India is in areas that fall into the category of secret science, usually not open to the prying eyes of a news correspondent. In India a bulk of the R&D investment goes into three strategic departments of

Defence Research and Development Organisation, Department of Atomic Energy and Department of Space.

This is not because politicians are not listening to the civilian scientists but simply just that security requirements of the region always tilt the tables in favour of the people pursuing secret science aimed at establishing military superiority.

While the dollar investment in R&D by India may look small as compared to many of the developed countries, the Indian Rupee can take you a long way as compared to the dollar since the cost of living is proportionately cheaper.

Since about half a century ago when India gained independence, the country has invested heavily in the S&T sector and today there are about 200 national laboratories and an equal number of R&D institutes in the public sector and about 1,300 R&D units in the industrial sector. The number of persons employed in the R&D establishments is estimated to be around 3,00,000.

In addition to R&D establishments, the other major body pursuing S&T activities in India is the country's vast university system. Comprising 162 universities, 32 institutions deemed to be universities and 10 institutes of national importance, it is a major source of S&T manpower development, producing around 2,00,000 S&T personnel every year. The total stock of the S&T manpower in the country at the end of 1990 is estimated to be around 4 million. A large pool indeed, but the best brains do migrate to the West (read America) in search of better opportunities.

Major Indian S&T initiatives that make it to the news:

- Space programme: India designs and fabricates its own satellites and can even launch up to 2,000 kg satellites in geo-stationary orbit, only the sixth nation in the world to have this capability. Planning an unmanned mission to moon in 2008.
- Atomic Energy: Indian scientists have mastered the entire nuclear fuel cycle and today about 2 per cent of all electricity is made through nuclear power plants. India detonated the first nuclear bomb in 1974 followed by another set in 1998.
- Defence: Aviation engineers design their own aircraft, both civilian and military, indigenously developed missiles with ranges of over 2,000 km with a payload of 1,000 kg.
- Oceanography: India has two permanent stations in Antarctica.
- Agriculture: Now a surplus food grain country, India was living ship to mouth in the 1970s. It may seem ironical but, in spite of all these capabilities India still can't provide safe drinking

water to a huge number of its people; poverty is high; access to modern health care is poor. India has a population of over one billion and continues to grow, which might stabilise only by 2040.

- Media scene: The outlets are many, but science news is still Orphan Annie: So much for the science foundations on which science communicators like me build our stories, but the other side, which is the whole humdrum of the media industry, is also equally important since ultimately that is where our works have to appear.

India is home to a vibrant and fully independent and privatised newspaper and television networks system. Newspapers are published in as many as 100 languages and dialects. Apart from English and 18 principal official languages listed in the Indian Constitution, newspapers are published in 81 other languages, mostly Indian languages or dialects and a few foreign languages. There are plenty of national 24-hour news channels. There are over 10 multi-edition national English language dailies.

THE BAD NEWS

But that was the good news, the bad news is that, despite this huge canvas that exists in front of any science correspondent in India, S&T coverage in the country is minuscule compared to political coverage, probably simply because every Indian is hugely political animal having an opinion on anything and being the world's largest democracy people are more than happy to express their freedom of speech that is enshrined in the Constitution.

This should not be read as saying S&T coverage is great and is not picked up because people are not interested—the people are interested, but there are many other barriers to putting out the perfect science coverage in mainstream media. More about that later. According to one recent study only about 1 per cent of the news space is devoted to science related material in newspapers. A recent survey done by a non-governmental organisation came up with the figure that on an average 3.3 science related items are carried every day in a newspaper.

Most newspapers used to have science supplements or at least special weekly pages but all have now but closed and in fact most newspaper organisations have also given up having specialist science reporters. To the best of my knowledge none of the news channels has specialist S&T reporters.

BARRIERS TO GOOD SCIENCE COMMUNICATION

Hurdles in the Labs

Even though the country has made huge investments, newsworthy science events are always few and far between. Even when researchers do come up with good results, most of it is published in Western journals and for most science reporters these are still out of reach. And what's more, work published in Indian journals is not considered good enough to be reported, even by Indians newspaper editors.

Outreach by scientists themselves is rather poor and most look upon media as a necessary evil that occasionally creeps into their sacred workspace. Scientists in India—most of them—consider media a pesky intrusion into their great work, and I have often felt this is a reaction used as a mask to hide their own inability to communicate their work to a popular audience.

Most laboratories have newsletters, which are by and large good for nothing, being full of information like transfers, retirements and promotions, with very little coverage of the science they carry out within their four walls. Even public affairs officers at most times are not very receptive since they are by and large overworked trying to make clippings from huge number of newspapers every day and in trying to give a positive spin to what most news hounds would consider non events. This is said keeping in mind the tremendous power a newsletter could wield, if only it were produced with effective communication in mind.

There is one minefield in science communication, which in my opinion should also be highlighted, which is reporting S&T that is carried out by private laboratories and the corporate sector. In my many years of science writing I have found cutting through the corporate veil as the most difficult, since the private sector always wants coverage but only on its own terms. Thankfully I don't have to spend too much time in their outwardly plush labs since they invest only a small amount in R&D. But the proportion will only grow in the coming years ever since India went in for large-scale liberalisation in the early 1990s.

In contrast even though the government may want to hide many of its findings, the bureaucracy leaks so much that getting access to quality information is not so much a problem as compared to trying and scaling the high fire walls put up by the corporate sector. I believe there is much the private sector can do to take news out to the public, but they perhaps couldn't care less.



MEDIA TOO

The blame lies with the media as well.

Of course you all must be thinking—here's this guy who thinks his breed is so lofty and above blame, and that all the blame lies with the other side of the table. In fact, if you were to ask the question, 'Why is science coverage so pitifully poor even though technology and science are so much of an abiding interest to all human societies craving for information?' The answer, most probably, may not lie so much in the corridors of S&T power, but with media itself.

Most editors are not bold enough to put S&T stories on page one. There seems to be an attitudinal problem since science is considered a soft sector, which does not help boost sales of publications. I was fortunate to have as my editor at *The Indian Express* a person who is an engineer by training and hence very receptive to good stories. The editors at *Science* are anyway a class apart, so I have little to complain about but then I am giving a country perspective and hence I have to reflect on the general scenario and not on exceptions. In many Indian newspapers and magazines, the experience of the reporter is that even if a good story is brought in, science is never hot with the top editors, meaning to say that the story, very often, gets killed.

But then not all of the blame lies with the gatekeepers at the newspapers since reporters are as much to blame. In my opinion most reporters are unable to write their science copy in a language that can be understood by all, but at the same time being racy and peppy enough to compete with other political, business and cinema stories to merit page one attention by the editor. And not to forget, writing on deadline a copy that is accurate and keeps the scientist happy too. In keeping with this scenario, India—with its huge network of labs and scientific institutions—has no single good course (or even an annual workshop) on science communication where attempts are made to break barriers between the journalist and the scientist.

The same malaise translates further, since most reporters in my region have never received any formal training in science writing, and they usually have to cover additional unrelated beats as well, leaving them with little time to chase in depth good stories that may be waiting to be broken. In addition every correspondent worth his weight in salt sooner than later wants to 'graduate' to political reporting, since that is where most opportunities lie. This leaves the field of science communication usually in the hands of cub reporters.

Words are not the only problem, there is this eternal problem of illustrations. A spectacular story can be very easily marred, finally getting buried on page five, if the right illustration, which usually means a lovely colour photo, is not available at the time of filing a story. Taking good photos of scientific subjects is not difficult but then most papers are just not able to spare staff photographers to accompany the reporter going to cover a science story. It's just not in the scheme of things.

IS THERE HOPE?

So, is there hope?

Yes, and plenty of it. Simply because as more and more media outlets compete with each other trying to carve a niche for themselves, many are slowly realising that the viewers and readers have a great appetite for well written science news stories and features. In addition, the Internet has opened up a whole new way of exchanging and storing information, which is only starting to being tapped by reporters like me covering scientific developments in back of beyond places. If only we can strengthen initiatives like Eurekalert and SciDev.Net on a global scale and then very quickly try to create regional and national mirror sites on the same lines, then there could be more effective science communication in places where it is needed the most.

(Based on a paper presented at a Conference on Science and Media, Tobago, 2002. Updated 2008. Views expressed are the author's own.)



Environment, Exotic Diseases and the Media: Emerging Issues

Patralekha Chatterjee

A decade ago, during the last global financial crisis, economists used the word 'contagion', to describe troubles that began in a faraway country, eventually spreading to much bigger ones, and then came home to roost.

Today, with the global and the local inevitably melding together, the analogy could apply equally to the world of diseases. For the media, the 'glocal' story is among the most exciting, and challenging.

One of the most telling illustrations of this emerging trend comes from an Italian village, barely known outside the country's borders. In the summer of 2007, Castiglione di Cervia, a village in northern Italy, acquired international infamy because of its dubious distinction of playing host to the first outbreak in modern Europe of a disease that had previously been associated with the tropics. Panic gripped the residents as one person after another fell ill with weeks of high fever, exhaustion and acute pain in the bones. The mysterious malaise stalking the village sparked a hundred rumours: people pointed fingers at river pollution, the government and most of all immigrants. At the end, the mystery was solved. After a month-long investigation, Italian public health officials disclosed that the good people of Castiglione Di Cervia were, in fact, suffering from a tropical disease, chikungunya, a relative of dengue fever, normally found around the Indian Ocean.

The much-maligned 'immigrants' suspected of spreading the disease were tiger mosquitoes who had begun to thrive in a warming Europe. Characterised by its black and white striped legs and small, black and white body, the tiger mosquito is a native of Southeast Asia, has spread to Madagascar, New Guinea and to the southern parts of the United States since the mid 1980s and in Nigeria since 2002. In 2007, the Asian tiger mosquito surfaced in New Zealand, Eastern Canada and Southern Europe.

Its presence in Italy was the result of the Italian climate growing warmer and more humid, favouring the proliferation of these mosquitoes.

How did chikungunya make its way into mosquitoes in northern Italy since no one in Castiglione Di Cervia had been abroad?

Eventually investigators discovered a link: One of the first men to fall ill in Castiglione Di Cervia had a visitor in early July. That visitor, a relative, an Italian, had previously travelled to Kerala in India. Chikungunya travelled to Italy in his blood, but climatic conditions are now such that it can spread and find a home there.

HOW CHIKUNGUNYA WENT ITALIAN

How chikungunya went Italian was a 'story' that created ripples across the globe. Splashed in the *International Herald Tribune* and carried in scores of newspapers, websites and audio visual media around the world, it brought home the stark reality underpinning the link between a changing environment and exotic diseases.

Spreading a disease in today's world is not rocket science. With cheap flights and the death of distance, a carrier of infection can transport the problem of one part of the world to another in a matter of hours.

The epidemic in a rural pocket of Italy established that tropical diseases were no longer necessarily confined to the tropics and that tropical viruses are now able to spread in new areas, far north of their previous range.

In India, chikungunya has been a story since 2006, when health reporters started focussing on it. But the linkage between the trajectory of the disease and environmental degradation was not emphasised by most reporters.

In late 2006, Indian reporters covering health noted that the country had been hit by the African strain of the virus that caused chikungunya. But it grabbed headlines in leading newspapers in the country only when chikungunya struck several states.

In a report on 7 October 2006, *The Times of India* declared, 'Chikungunya is now an epidemic.' Earlier epidemics of chikungunya fever in India, reported in 1963 from Kolkata, in 1965 from Tamil Nadu, Andhra Pradesh and Madhya Pradesh and in 1973 from Barsi in Maharashtra were caused by the weaker Asian strain of the virus, the report said. National Institute of Virology Director A.C. Mishra told *The Times of India*:

Earlier, outbreaks of chikungunya used to be localised and died down faster because the Asian strain used to be weak. This year, we have been hit by



the more virulent African strain that has come from Madagascar. It infects faster and will cause a huge number of cases. That's why this year, we are getting reports of the disease in village after village, town after town. The African strain, isolated from the viruses found in Andhra Pradesh, Karnataka, Rajasthan and Tamil Nadu, is highly pathogenic. That's why the outbreaks are widespread.

The report in *The Times of India* was one of the few that did touch on the environmental dimension when it noted that 'excessive rain in several parts of India is responsible for the current spread. In such a situation, it is difficult to empty containers that get filled with rainwater, the perfect breeding ground for the chikungunya causing mosquito...'

In July the same year, *The Hindu* carried a report which spoke of the awareness campaigns about Chikungunya in Tamil Nadu's Krishnagiri district.

In April 2006, *The Indian Express* reported that the 'dengue-like fever, chikungunya' was back after 32 years.

FOCUSSING ON THE LINKAGES

Express health reporter Toufiq Rashid was among the first in the country to focus on the linkages between the 'global' and the 'local'. In a report in *The Indian Express* dated 27 April 2006, she noted:

Caused by an alphavirus spread through bites from the *Aedes Aegypti* mosquito—the same mosquito behind dengue—chikungunya is not considered fatal. But 77 deaths since 2005 on the Indian Ocean island of Reunion have been linked to chikungunya. Health officials in Delhi said the last outbreak in the country was reported in 1974. 'The virus must have been silent but it has made a comeback,' said an official. Chikungunya, which has dengue-like symptoms of very high fever and rash, is highly contagious and disabling. The name itself is Swahili for 'that which bends up', a reference to the positions those afflicted are forced to take because of pain in the joints. In recent months, its outbreak has been reported from Mayotte, Mauritius and Seychelles. Countries like France, Germany, Italy, Norway and Switzerland have reported importing cases, courtesy people returning from these islands. A mixed outbreak of chikungunya with dengue was reported from Andhra Pradesh between December 2005 and February 2006. The virus was isolated by Pune's National Institute of Virology in March but the figures have been rising ever since. Latest figures show over 30,000 cases in Andhra (Tirupati is the worst hit), over 70,000 in Karnataka (17,000 cases in Gulbarga alone), and, now it has struck Maharashtra.

QUESTION NOT ASKED

Back in 2006, not too many environment reporters in India asked how tiger mosquitoes could travel so far from their usual habitats. The fact they did precipitated a public health challenge and the health reporters cottoned on to the story first. But the context lay in the stories filed by environmental reporters. Unfortunately, because environment and health are not always covered by the same reporter, the linkage between these two critical issues was not made forcefully.

Fortunately, things are changing.

The journey of the tiger mosquito to northern Italy is the outcome of climate change—the one issue that jumped out of headlines in 2007 and pushed environment to centre-stage. Climate change creates conditions that make it easier for the Asian tiger mosquito to survive in normally temperate countries and opens the door to diseases that didn't exist there previously. Changes to the environment affect human health in ways old and new. There are the traditional diseases of an unclean environment—cholera due to dirty water, malaria due to stagnant pools, bronchitis due to smoke from an indoor wood fire—that have been known for years. Then there are the relatively new ones—all sorts of respiratory diseases due to air pollution around factories and areas with heavy traffic, arsenic poisoning due to overuse of groundwater, cancers often ascribed by doctors to food grown on pesticide-saturated soil.

This means that the reporter covering environment has to increasingly speak to doctors and the health reporter to environment specialists. How well has the Indian media internalised the need to cross-reference the two vital areas?

The link between degradation of the environment and resultant human diseases is known and reported in the Indian media, but forms a small percentage of the reportage carried out whenever any major public health crisis occurs. For example, the *Hindustan Times* carried 24 reports on the cholera outbreak in Orissa in during the 2007 monsoon season, but only one of those examined the link between water scarcity, pollution of the few water sources available, and cholera cases.

During the Bihar floods of 2007, *The Times of India*, which has an edition in Bihar capital Patna, covered the human misery extensively—publishing over 100 articles on the floods during the period. But only in two of those articles were the connections between floods and environmental causes such as river embankment rise were mentioned. There was no mention at all of the Intergovernmental Panel on Climate Change (IPCC) report,



which had predicted more frequent and more damaging floods due to global warming, especially in the tropics and sub-tropics.

The *Hindu* had fewer articles on the Bihar floods, but one of those articles examined the environmental causes of the flooding in depth, based on an interview with an expert.

The global media carried many reports on the spread of chikungunya to Europe due to global warming, and these reports were carried in the Indian media as well. The Indian media has also reported that chikungunya had increasingly spread to northern India, where the winters used to be too severe in the past for the survival of the tiger mosquito that carries the chikungunya virus. But the connection between climate change and the spread of the disease within India was missing.

In coverage of respiratory tract diseases such as bronchitis, however, the connection between air pollution and the disease is repeatedly brought out in the Indian media and forms a part of almost every recent report on the subject.

Coverage of the January 2008 bird flu outbreak in West Bengal by the national media showed the same trend—journalists appeared to be aware of the connection between pollution, lack of sanitation and the spread of the virus, but did not draw the reader's or viewer's attention to it in every report. They did so, sporadically. And there was no reportage on it in the national media once the outbreak was over, at a time when it would have the maximum impact—the epidemic was recent enough in peoples' minds, while they were now in a position to move back from a firefighting situation and take long-term measures to improve sanitation and reduce pollution.

Malaria is one area, like bronchitis, where the environmental linkage is well known and well reported in a majority of articles on the subject that appear in the national media.

The same can be said for water pollution. There have been many excellent articles in national newspapers and television channels about the health effects of water pollution across the country, from Punjab to Tamil Nadu.

LINK, NOT OFTEN ENOUGH

Overall, looking at the Indian media's coverage of human diseases caused by the degradation of the environment, it can be concluded that the link between the two is drawn, but not as often as desirable, especially during crises such as a cholera outbreak or an epidemic caused by floods.

Most reporters covering the environment beat today do realise the need to frame environmental degradation in health terms and health reporters have begun to link health with environment. In some national papers, the task is rendered easier by the same reporter covering both these beats. What is not so easy is to make news managers appreciate the link on a regular basis and assign more space to this coverage. The periodic health pages in most newspapers or health programmes in television channels are still largely concerned with private health issues such as obesity. Public health, vitally connected to the environment, often gets the short shrift.

The result is that coverage of public health issues remains by and large episodic—whenever there is a major problem. If there is an outbreak of cholera or avian flu, that undoubtedly gets media attention in India today. But the attention is often too fleeting to allow the reporters to go behind the immediate news of death numbers and investigate the links between environmental degradation and its current effect on human health.

In an era where editorial space in media outlets is strictly limited, there is no easy solution to this.

But the good news is that the ‘health’ angle has made environment easier to sell. This is particularly evident with an issue like climate change. That is why global warming, once considered a subject that evoked yawns among the vast majority of journalists in India and elsewhere, is suddenly ‘hot’. One of the issues that gave it immediacy is its multiple impacts on human health. A wide range of diseases—vector-borne, water-borne and respiratory—have demonstrated links to climate change.

Infectious diseases are not esoteric issues of concern only to medical journalists any more. They do not respect geographic boundaries, and can cause sudden panic, as the chikungunya flare-up in Italy demonstrated. An outbreak of the plague in India one day can have consequences in California the next.

Recently, newspapers in India and across the world flashed the story of a woman with multidrug-resistant tuberculosis (MDR TB) who flew from India to the United States in mid December 2007, triggering a nationwide panic in the States.

The US Centers for Disease Control and Prevention (CDC) in a statement sent to clinicians on 29 December, said the patient, a 30-year-old woman, was diagnosed in India with MDR TB and travelled from New Delhi to Chicago on 13 December on American Airlines Flight 293. Then, she took a shorter flight within the United States.

The CDC recommended TB testing for passengers who sat within two rows of the infected woman as well as airline crew members who worked

in the cabin during the flight. All these dimensions provide the panic quotient that makes 'news'. Predictably, the glocal story was splashed in the US media as well as in India.

'Nine people in Illinois are being sought by public health departments after sitting near a woman who had tuberculosis on a flight from India to Chicago in early December, health officials said,' reported *The Chicago Tribune* in a story dated 31 December 2007.

'Indian woman traveller puts USA on TB alert', ran the headline of a story on the website www.indiatime.com

INCREASINGLY IN DEMAND

Stories about environment and exotic diseases with high panic quotient will be increasingly in demand. Today, the challenge before Indian environmental journalists is to find the time and space to focus on the other stories that deal with complex health-related impacts of environmental ills before they have reached the crisis stage.

How can these issues be portrayed so that the ordinary man or woman is compelled to read, watch or listen?

One way is to draw the link between apparently disparate phenomena. When the man or woman on the street realises that the new human pandemics that affect her family and her community directly are profoundly connected to what is happening to the trees in the forest, the fish in the sea, the birds in the sky and the animals of the earth, then she will not need persuasion to read on, watch or listen. Once the reader, viewer or listener realises that SARS or avian flu viruses breed more easily in polluted environments, then it is easier for her/him to draw the link between environment and health, and see how infectious diseases travel, increasingly across borders. As with many other issues jostling for public attention today, it is not the content but the style in which a certain message is being delivered that can decide whether a story is page one material or relegated to page 14. Sometimes labelling a story as an 'environment' story gives it an unnecessarily narrow focus because the environment touches so many other spheres and affects so many people. Even specialised medical journals such as the London-based *Lancet* group of publications often use a style intended to appeal to the non-specialist reader for its news sections. An article headlined 'Pigs, Politics and Poor Governance' (*The Lancet Infectious Diseases*, October 2005) analysed the underlying reasons behind an acute outbreak of Japanese encephalitis in Uttar Pradesh thus:

Bill Clinton's whistle-stop visit to Uttar Pradesh to promote a rural health mission in early September provided a welcome distraction. But India's most populous state remains in the doghouse for its lack of preparedness, and tardy pace in tackling an acute outbreak of Japanese encephalitis (JE). Close to 700 people, mostly children, have already died since late July from the mosquito-borne disease, endemic to this paddy belt. Worst affected is Gorakhpur, 250 km east of state capital Lucknow. By September, the disease had spread to more than 27 districts in Uttar Pradesh, including Lucknow, to adjoining Bihar, and across the border to Nepal—one of the world's poorest countries—where a 9-year Maoist insurgency has confined government health care to a few large towns and cities. More than 200 people have died of JE in Nepal. Three key risk factors can trigger a JE outbreak: high density of *Culex* spp mosquitoes, paddy cultivation (or ample irrigation which favour the breeding of culex mosquitoes), and presence of amplifying hosts such as pigs. In Uttar Pradesh's case, pigs, politics, and poor governance have together contributed to the high death toll in the state.

It also pointed out that 'when caught in the midst of a similar epidemic 4 years ago, the southern state of Andhra Pradesh launched a concerted drive to separate pigs from human habitats.' And that 'Andhra Pradesh has brought down the death toll from JE to zero by introducing public-health measures, and by making the vaccine a part of the routine immunisation programme...' Environmental degradation, if unchecked, can mean unhealthy, damaged people who can derail the Indian media's favourite narrative of the country as an economic powerhouse. Environmental ills are also becoming notoriously class-neutral. The point was brought home in a telling comment by eminent economist Jayati Ghosh.

In a 2006 article 'The mosquito is a great leveller', published in the *Asian Age* and the *Deccan Chronicle*, Ghosh wrote that in drawing room conversations it was initially felt that dengue was only for the lower middle class and poor who live in dirty localities. The rich drink bottled water, travel in air-conditioned cars, AC (no concern with environmental issues), are oblivious to public health systems (as they can pay for better facilities at private hospitals) and the only place they share with the rest is the road. That is why they are most concerned about poor conditions of roads. If they had their way they would get exclusive roads for themselves.

However, when the Prime Minister's family members were affected by dengue, they realised that the mosquito can bite them also, the report noted. For a while now, the notion of the 'public' has gradually receded from the consciousness of the elites in India, pointed out Ghosh. Not only are private solutions found for most conditions, but even the very

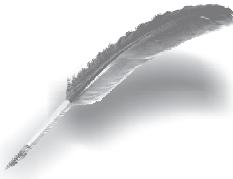
idea that there are still spaces (and indeed, places) that are universally accessible and have universal impact is barely recognised any more. Apart from roads, the rich in India have found ways of avoiding, bypassing or simply transcending the need for responding to external conditions or accessing public services. Atmospheric pollution, for example, has become the problem of the poor.

Safe drinking water is no longer considered something that must be provided by civic authorities. Instead, the rich buy commercially bottled water or install special water filters in their home and offices, while the poor are left to fend for themselves as best they can with the inadequate and mostly polluted water available in public taps or through tube wells. Similarly, health care services are now characterised by the most extreme duality, with the rich opting for deluxe institutions with 'world class' infrastructure (although not necessarily better medical attention). The poor are forced to avail of either very overcrowded public facilities or access medical shops where they are routinely exploited and often provided with inadequate care.

In all this, the concept of public health has been somehow forgotten. It takes something like an epidemic which affects rich and poor alike, to bring home the essential public nature of health issues to India's elites and the mainstream media. WHO's theme for World Health Day 2008 is 'protecting health from climate change'. As health administrators around the globe use the occasion on 7 April to remind policymakers about the link between climate change and human health, one hopes the media will accelerate its role in getting the message across. The message is loud and clear.

One of the effects of global warming, according to the IPCC, is that frequency of extreme weather events will worsen. That means there will be more droughts, more floods and more storms, especially in the low latitudes. After the publication of the last IPCC report, scientists have said that even in mid-latitudes, it is very likely that summers will be hotter and winters will be colder, something seen most tellingly in China since the beginning of 2007. Each of these events has major impacts on human health.

Drought means water scarcity and malnutrition. Storms and floods mean waterborne diseases, lack of clean water, loss of crops and resultant malnutrition. Hotter summers again mean water scarcity, while colder winters mean respiratory diseases. It is for the reporters to draw these links and then for the commentators to persuade policymakers to address the root causes of so many diseases—the poisoning of our environment.



SECTION THREE
Wildlife Journalism



At the End of a Dark Tunnel, a Faint Light

Nirmal Ghosh

BAD WILDLIFE JOURNALISM OR JUST BAD JOURNALISM?

In the early 1980s, shortly after authorities banned cattle from grazing in the 29 square kilometre Keoladeo National Park at Bharatpur—the famed wetland south of New Delhi popularly known as the Ghana—several farmers from neighbouring villages attempting to force their way into the sanctuary, were killed by police trying to enforce the ban.


During the ensuing uproar, a senior and highly respected journalist colleague, who wrote for one of the country's then-leading Hindi news magazines, went to the Ghana to see things for himself. Upon his return he wrote that banning the cattle was contributing to the extinction of the rare Siberian Crane, because the cranes habitually entered the sanctuary riding on the backs of buffaloes.

This bizarre report found its way into print in India's leading newsmagazine of the time, *Sunday*, to which the journalist was a contributor. Tens of thousands would have read the report and accepted it as true.

I asked the journalist about the source for his report. He said his source had been a rickshaw driver in the Ghana.

For those who do not remember, the western flock of the Siberian Crane *Grus leucogeranus*—now functionally extinct—used to winter exclusively in the Ghana, flying in thousands of kilometres every autumn from Siberia via Iran, Afghanistan and Pakistan. Their numbers were dwindling sharply in the early 1980s, at the time of the cattle ban episode.

The cattle ban was subsequently determined to be ill-advised. Cattle, the late Maharaja of Bharatpur, whose ancestors had created the Ghana, told me, had always been a part of the ecosystem—though clearly not in such large numbers. But that is another story.



I could only surmise that the rickshaw driver believed that cattle egrets which commonly sit on cattle to snap up insects, were Siberian Cranes. Or else he thought (more probably and accurately as well) my journalist colleague—whose specialty was politics—was gullible enough to believe a yarn. I have come across many instances of forest guards, jeep drivers, guides and so forth in wildlife reserves making things up, perhaps just to entertain themselves at the expense of tourists unfamiliar with the jungle.

Around 10 years later in the early 1990s I was sitting in Singapore sifting through a copy of the respected *New Scientist* magazine and came across an article on Sariska Tiger Reserve in Rajasthan. Written by an Indian contributor, the report was about the threat of mining. The writer stated that mining in Sariska was degrading the habitat of the cheetah, which would soon be extinct if the situation continued.

He was about 50 years late.

One night in 1947, Maharaja Ramanuj Pratap Singh Deo of the erstwhile Indian principality of Korea in Madhya Pradesh's Surguja district, came across three cheetahs by the road. He shot and killed them with two bullets. All three were males. That remains the last authenticated sighting of the Asiatic cheetah in India.

I wrote to the *New Scientist* pointing this out. To the magazine's credit the editors replied apologising for the mistake, and saying they would not accept contributions from that writer any more.

Again, I can only surmise that the writer may have meant leopards rather than cheetahs.

But neither of the possible explanations for the two farcical reports can excuse both unforgivably mediocre and lazy journalism and professional negligence by editors and sub-editors.

The two episodes demonstrated the depressing reality that until very recently, wildlife journalism in India has been a painful example of a colossal failure of media owners, managers and professionals, to recognise and give due priority to an issue that demands more than superficial treatment because of its importance—and that demands professional competence.

Even fundamentals like the fact that the cheetah and leopard are two distinct species (now sadly separated in time) escaped—and continue to escape—the consciousness of generations of copy editors and sub-editors who are supposed to be the backstops of journalism. I have lost count of the number of times I have seen a picture of a cheetah in mainstream newspapers and magazines, captioned as that of a leopard—or of an African

elephant described as an Asian elephant. The Internet has ironically made it easier to simply lift pictures—a fatal temptation to those who believe an elephant is just an elephant, and any cat with rosettes is a cheetah.

Sometimes this basic ignorance reaches bizarre levels; until recently a T-shirt available at retail stores outside the gates of Corbett National Park featured the outline of an African elephant. And revisiting the case of the hapless Siberian Crane, the government-run India Tourism Development Corporation (ITDC) once ran a series of advertisements in the late 1980s, one of which promoted Chilika Lake in Orissa and explicitly stated that Siberian Cranes were to be found there.

I visited the person at ITDC at the time, responsible for their advertising, and pointed out that they were misleading the public. The Siberian Crane had never been recorded in Chilika Lake and did not visit it. Oddly enough, yet another senior journalist from a Hindi magazine was in the room as well, and turning to me, he said, 'Of course they are there, I was there myself last week, I saw them.'

The ignorance of many journalists has to be seen as a product of the ignorance of society at large. Journalists, however, are supposed to be better informed.

LONELY PIONEERS

The earliest of our wildlife journalists that I remember were the late M. Krishnan—though he was a writer, essayist and photographer more than a journalist in the classic sense—and Usha Rai.

Apart from a few early photographers like T. N. A. Perumal, E. Hanumantha Rao and M. K. Ghorpade whose works and notes found their way into exhibitions and some publications, Krishnan and Rai wrote largely alone.

Usha Rai's reports also only rarely made it to the front pages. Until the 1980s, wildlife journalism was largely relegated to inside pages of Saturday and Sunday travel and leisure sections. A couple of attempts at starting wildlife magazines flopped, until the advent of the magazine *Sanctuary* in the mid-1980s provided a qualitative leap.

Bittu Sahgal, founder and editor of *Sanctuary*, was able, through sheer persistence and excellence in production which guaranteed advertisers good paper and printing, to establish the magazine which is today still India's only wildlife magazine.

A few other magazines in the 1980s with visionary editors—like *The India Magazine* and *Frontline*—began running large articles on wildlife, but

they too were read only by a tiny fraction of India's vast and growing middle class. Yet they did serve to encourage writers on wildlife, who by and large, however, came from outside mainstream journalism.

Among some names which emerged at the time were those of conservationists like Valmik Thapar, whose books on tigers served to expand wildlife literature in a way that made it accessible to a wider general public. Dr Ullas Karanth also emerged as a new breed of wildlife biologist in the same vein as Dr George Schaller, who wrote about their experiences, studies and conclusions for an audience beyond scientific journals.

But many mainstream, mass-media journalists who attempted to write on wildlife often committed glaring factual errors as in the two instances noted earlier, thus misinforming the public and perpetuating myths and disinformation—which is surely the opposite of what a journalist is supposed to do, and possibly one of the greatest sins in the profession of journalism.

But this was a reflection of the fact that they were largely general or political journalists, and not trained to write on wildlife which is essentially a subject that demands the same specialised knowledge as, say, economics or health. It certainly demands some knowledge of ecological sciences. And wildlife issues, like any other, have to be written about in the proper context, with proper research, and backed up by field work.

A general ignorance of the difference between a plantation forest and a natural forest, or between a cheetah and a leopard, does not help. Very often mainstream journalists adrift in a strange environment, appear to be susceptible to swallowing the most blatant nonsense from vested interests—as in the journalist who quoted a Gujjar elder in Rajaji National Park in *The Illustrated Weekly* as saying Gujjars—semi-nomadic herdsmen—never used axes to lop trees, but stripped branches of their leaves gently with their fingers. This, in a forest where one sure way to locate a Gujjar was—and still is—to follow the sound of his axe!

JOURNALISM 101

As in all forms of journalism, there is no substitute for proper fieldwork. Reports from many sources very often fall apart when checked against facts on the ground—even those from reliable sources. When I was covering the H5N1 (avian flu) outbreak in Thailand in late 2004, I visited a poultry farm which had been mentioned on the BBC. Upon arriving there, I found that the BBC reporter had mixed up the names of two farms some 5 kilometres apart.

It is essential to see for oneself what is going on, but it is also no point doing so unless one has done the basic background research first. And that means 'Journalism 101': read the clippings, read the books, talk to the experts, then go to the field and cross-check the information with further conversations with a range of on-site locals and the physical facts. A one-source story is not acceptable. There is no need to go to journalism school or obtain an expensive mass communication degree to learn these fundamentals. But there is also no room for professional laziness. Wildlife is too important a subject to be treated casually.

During the period I am describing—the 1980s—environmental journalism by contrast, was maturing. The big dams issue and the Bhopal gas disaster helped create a new breed of environmental journalists and propel environmental issues to front pages and on to the national agenda. *Down to Earth* magazine produced by the New Delhi-based Centre for Science and Environment was a child of this maturing.

A LARGER DISCONNECT?

But apart from the Silent Valley dam controversy, in which a pristine rainforest wilderness in south India was in danger of being inundated, wildlife was seen as incidental, a poor second cousin to the larger issues of the environment. This is possibly a reflection of the larger, more universal and growing disconnect between man and nature that began arguably with the industrial revolution and the dawn of the age of science.

Since the industrial revolution, man has increasingly seen himself and his destiny as outside nature and controlling it, rather than of nature and part of it. This could also stem from a fear of our own mortality, and a desire therefore to control our environment. Nature and wildlife has suffered from a confluence of two mutually reinforcing factors: ignorance and fear. We fear what we do not know. Thus the tiger was and is feared and respected by many communities—for instance the indigenous Orang Asli of Malaysia, and fishing communities in the Sunderbans delta—dating from a time when they co-existed with the tiger, and while under threat from the predator also lacked the tools to systematically kill it.

Elsewhere, sadly for the tiger, commercialism and sheer firepower were good enough tools to overcome that fear and respect and assert the dominance of our species. And today, tolerance for wildlife has sunk to a new low.

Subrata Pal Chowdhury, at the time of writing a technical advisor to the chief wildlife warden of West Bengal and one of the country's

foremost experts in chemical immobilisation of wildlife, once mentioned this increased intolerance on the part of the public. The mere sighting of a monkey or jackal or jungle cat was enough to prompt a flood of semi-hysterical calls for help to the wildlife department, he remarked—much more so than, say, 10 or 20 years ago.

COMING IN FROM THE COLD

Around the late 1980s reports on wildlife began creeping up on to the first three pages of mainstream newspapers. I deliberately use the term reports on wildlife, and not wildlife journalism, because the latter as a genre was still in its infancy. Usha Rai was still holding the fort almost single-handedly, but Raj Chengappa who wrote widely on environmental issues was also emerging, while Bittu Sahgal's *Sanctuary* performed the admirable and critical role of nursery for writers on wildlife—but still limited very much to a tiny niche market.

The reports that made the front pages were in the nature of hard news, which is what editors and the public want. Tipped off by a member of the Wildlife Board for instance, I visited Rajaji in the late 1980s to investigate reports of elephant poaching. Rajaji is a proposed but unfortunately not yet gazetted national park under severe pressure from a multitude of factors—roads, railways, industry, people, and urban and industrial sewage. It is also the northwesternmost tip of the remaining habitat of the Asian elephant in the wild. It is the westernmost part of the Siwalik elephant reserve, and once was contiguous through a viable corridor, with Corbett Tiger Reserve. The corridor has since shrunk to a couple of narrow belts of poor scrub and vertical cliffs.

As always, the reports hid more than they revealed, but I was able—thanks to some knowledge of wildlife and ecosystems and the local geography from my purely informal on the job training since a childhood spent visiting wilderness areas—to get to the facts. More importantly, I got on the pillion of a motorcycle driven by a local farmer who took me, technically illegally, deep into the jungle to see for myself the remains of a tusker which had been killed. In my experience—and this goes not just for wildlife journalism but journalism in general—there is nothing like a first hand look at the situation on the ground.

That elephants were being killed for their tusks with impunity in Rajaji, so close to the capital, was news; my article made the front page of *The Times of India*.

TV AND NEW MEDIA

Since then the canvas for wildlife news has expanded quite dramatically thanks to a coincidence of the growth of television and new media, the appearance of a new generation of Indian wildlife film makers, the easy availability of information, and a general rise in awareness of issues spurred by this confluence.

Even so, the narrative remains loaded with anthropomorphism, and negative stereotyping of wildlife. Elephants ‘rampage’ or ‘run amok’ for example, with little attempt to nuance or explain context. Tigers are regularly referred to as ‘ferocious’. When a human is injured or killed by a wild animal, the reaction of the media is immediate and often borders on hysteria. All perspective—an essential ingredient in professional journalism—is lost.

In a short (and not scientifically rigorous but certainly indicative) exploration of the issue of man-animal conflict in the Corbett National Park area in north India, The Corbett Foundation (of which I am a Trustee) found that far ahead of injuries caused by animals, the leading cause of emergency hospitalisation in Ramnagar town, was suicide attempts by women.

Yet that, of far greater importance for what it says about our society, and a compelling human interest story for journalists, is largely ignored or at the very least under-reported.

A tiger surprised by a woodcutter and mauling him or her, by contrast invites the full glare of the media. Invariably, through the narrative runs the thread of humans besieged and under attack; an image not significantly different from that of 100 years ago when tigers were considered dangerous and it was open season for those who hunted them.

A PROFESSIONAL FAILURE

This reflects a professional failure of the media in India, on many levels including fundamentals such as deployment of the right personnel in the right job. Unless a reporter has a long track record in multiple fields, adjustment from one field to another (say from commodities to public health) is not easy.

The failure of the media on wildlife is on par with the failure on the political journalism front to cover India’s neighbours. (Indian intellectuals are fond of deriding the insularity of superpower America, ignoring the fact that emergent superpower India is equally insular. The average Indian



views the world through a prism of stereotypes and knows more about the West through the mass media than about Bangladesh, Sri Lanka, Pakistan, Nepal, Bhutan and Burma.)

Similarly, it is ironic that the average Indian knows more about wildlife and conservation issues from watching Discovery Channel, Animal Planet and so forth, than from our own newspapers and magazines. But while this irony prevails, the fact is the proliferation of media and information means there is more public interest in the subject—albeit often of a misinformed or negative kind.

But a new generation of journalists and editors is now in the process of mainstreaming wildlife journalism. A new generation of film makers is also widening the canvas and bringing activism to films, using their skills to lobby for change.

Many newspapers and magazines now have environmental beat reporters or correspondents—though in most cases, training on subjects related to their particular beats, is almost non-existent. Federations of environmental journalism, both local and international, regularly organise trips to wildlife reserves and national parks, but do editors and media owners do the same? Not quite yet.

Media owners and editors need to wake up to the reality that wildlife is a critical subject and will be more critical in the years to come.

Most wildlife species are dwindling, not growing in numbers—and we are living in an age of mass extinction triggered by human activity. The planet's biodiversity is under severe threat, which impacts the fundamental structure of life on Earth.

One of the drivers of this sixth mass extinction is trade in wildlife and plant species, which is reckoned to be the third largest in the world by value (excluding timber) after weapons and drugs. Today the trade in wildlife is run by transnational criminal syndicates. There is little sign that media owners and editors take this seriously, yet by definition it is a huge story.

The media cannot afford to miss this story by leaving it to a small handful of journalists who may be personally interested in the issues, or have the instinct and skill to spot a story and do it well.

Wildlife today is more than just a cute or charismatic species or a fringe special interest group. It is a story about the law, trade, crime, economics, politics, ethics and evolution. Media owners and editors, if they are to be considered truly professional and responsible, need to catch up with this reality at many levels, from policy and priorities to basic training and deployment, quality control and delivery.



Tiger Defends the Biodiversity

Malini Shankar

‘Environmental journalism’—these two words bring to the reader’s mind a whole world of environmental complexities in a readable or appealing form, depending on which medium is being used to convey the complex issues and on which context of time and space it is being used.

While journalism is the fourth pillar of democracy and seeks to scrutinise the state or any other public service agency which manages public property and public interest, the professional prefix environmental brackets the sympathy of the writer to the Green issues. All the same, the professional duty of objectivity cannot be bypassed in every professional step and angle of the story or the policy in focus. Both sides of the argument pertaining to the issue need to be placed before the reader or the listener/viewer and the competence of the environmental journalist lies in moulding the opinion of the reader to sympathise with the ‘green’ worldview without sounding judgemental oneself. The environmental journalist has to mould the opinion of the reader after explaining the what, where, when, why, who, how of the issue.

MEDIA FAILURE?

Let me put this across with a few examples. Why has the media in India failed to shape a ‘green’ philosophy and policy? More than 20 years after the Environmental Protection Act was passed in 1986, why is the country’s media still stuck with the awareness campaign tone? Why is Agenda 21 not an issue in India even 5 years after the World Summit on Sustainable Development, the second Earth Summit?

Take Climate Change. Why has the Indian media not been able to criticise the Government of India’s short-sighted policies on climate change and CFC emissions? It was the Centre for Science and Environment that

campaign for and was largely responsible for introducing the concept of CNG in Delhi's public transport. Why has the media not ensured introduction of CNG in public transport in all the other metros and cities across the country? Why has the media failed to impress on policy makers the need for better infrastructure instead of rapidly visible vertical growth? Had the media been severely critical of the government policies of fuel tax, development and overconsumption patterns, the average citizen on the road would by now have been able to take critical decisions, despite climate change being a nascent and developing science. If the media had been 'progressive' about Agenda 21, CFCs, climate change, etc., we would have had a green policy and a green political party by now. Environmentalists are often accused of being doomsday prophets but if the media had done its job effectively, we would have had a far more responsible and responsive society as regards carbon footprints and green house gas emissions. Thanks to this lackadaisical media complacency, how many people apart from the converted are aware of the green house gases and carbon footprints?

Similarly, there is the impending water crisis. If we do not take measures to augment our water resources and impress on every single Indian the need to use water resources 'sustainably' everyone will suffer, but the poor and the marginalised will suffer more. That is because those who are better ordained economically will store water resources beyond their needs. The poor and marginalised folk who do not have access to massive and complex storage systems will be the poorer of water resources.

The much harried urban housewife will be splitting her hairs to store more water in increasingly diminishing space—large amounts of water which might or might not have practical use: she might use this water to heat so that her shampoos, potions and lotions will leave a lasting lustre on her pseudo brown hairs! Complicating her life further is her suspicion that the source of water is infected; so she boils and cools drinking water five times in different containers!!!

It is the brood of environmental journalists who can make a visible difference in reaching the goal of 'reducing by half the number of people who lack access to clean water and sanitation atleast by 2015' as the UN pledged at the World Summit of Sustainable Development held in Johannesburg in 2002 and was signed by India. Like the media was indeed capable of reducing poverty, even by a small measure!!! What a shameful paradigm it is! But the media can scrutinise fallacious policy initiatives—like privatisation of water supply for the betterment of the 'General Will' that Rousseau said before the French Revolution.

GREATEST RESPONSIBILITY

But the greatest responsibility now for the media is the wildlife crisis, in my view. The media should lend a voice to the cause of the mute and helpless wildlife that is being decimated in the name of human rights and scrutinise the fallout of lax administration and potholed policies that adversely affect wildlife conservation. The rate at which tigers are disappearing from the forests and ending up as branded balms on shelves of Traditional Chinese Medicine (TCM) markets, we are likely to lose the remaining 1,400 tigers in less than a year. Not to sound like a doomsday prophet again, but the tiger is indeed at the head of the faunal diversity and biodiversity. If we lose the tiger, we are going to lose all the wildlife which forms its prey-base and the remaining Protected Areas which serve more as catchment areas for our water resources than as homes to the precious wildlife. It is our job—as environmental journalists to create the requisite awareness amongst the common man that biodiversity is endemic and regional by nature. If we lose the biodiversity in say the Western Ghats we lose the wildlife/faunal diversity and with it will disappear the millions of fresh water sources underneath the surface of the soil. As it is, it is bad enough to see deforestation on the Western Ghats, but what if the dwindling forests desertify the Western Ghats?

The resultant loss in catchment to the South West Monsoon will have a cascading and very complicated but deleterious effect on the entire Indian economy. That is when plush armchair economists will realise that the Sensex booming will not matter as much as our bread and butter issues. The drought of the 1980s should not be erased from the collective media memory even if it is condemned to the shelves of archives in media houses. Talking of the drought of the 1980s, did the Indian media find plausible solutions for disasters like drought? Or for that matter how much has the Indian mass media contributed to disaster preparedness in the post-tsunami era? It would make an interesting debate. Apart from think tanks and agencies, the common man is not prepared any better for disasters even after the tsunami.

I really do not mean to be a doomsday prophet, but god forbid if there is a cataclysmic event like a super earthquake splitting India into two halves or portions, it is the remnants of biodiversity that will help man rediscover the agricultural legacy, for biodiversity is the germ plasm of agriculture for civilised man. The other option would be to invite American or foreign agricultural scientists to come and teach the survivors the art and science of cultivation of food grains! There is thus a far more serious undertone to the significance of wildlife conservation than the

sensationalisation of poaching and eco crimes. Mature environmental journalism would strive to create this awareness and will be far more effective in sending this message rather than the sensational news of the slaughter of 22 tigers in Sariska Tiger Reserve.

That does not mean to distract my attention from the 77 cases of wildlife crime registered by forest officials in Sariska. In Sariska Tiger Reserve there are, as of date, at least 77 cases of wildlife crime registered by forest officials and investigations are currently underway to prove the culprits guilty in a court of law. From turtles, to frogs, peacocks to parakeets, love birds to snakes, mongoose to leopards, jackals to hares, and tigers, and now sea cucumbers, octopuses, sea horses they were all decimated by the opportunistic villagers in and around Sariska. The environmental or specifically the wildlife journalist has to scrutinise the role of the state in tiger/wildlife conservation, while empathising with the environmental factor. It is after all the state which is vested with the responsibility of wildlife protection. I have to scrutinise what led to the conflict, the why of the issue. It is also my professional duty to remind the state about the recommendations of various committees in various reports—recommendations that are expected to augment conservation of wildlife. These reports have a notorious tendency of gathering dust and it takes us to dust the reports' recommendations.

Rampratap Meena confessed to the field director of the Sariska Tiger Reserve in March 2005 that he had indeed laired a tigress that had killed his grazing buffalo by laying a foot trap on the forest fringe where the tiger's kill was discovered. After killing a comatose tiger in deep distress for being trapped and injured by the foot trap, he skinned the cat and sold his wares to a wildlife trader from his village on the outskirts of his village. Though he was arrested, he was let out on bail. The buyer or trader was also booked and finally sentenced in June 2007. He has since started serving his sentence in a jail in Rajasthan. After being released on bail, Rampratap Meena and his accomplice are now auto rickshaw drivers trying to lead a normal lifestyle in a big town in Rajasthan. Here it falls on the media to scrutinise and pressurise administration constantly to book all the guilty, to highlight to the political elite the lacunae in the laws. Unfortunately the Fourth Estate cannot scrutinise the role of the Judiciary for fear of contempt of court. My commitment to resurgence of the tiger is so passionate that I honestly do not mind facing the wrath of the courts. I have with me the minute details of the wildlife cases which allowed indicted people to seek bail on flimsy excuses. I do not mind writing about it even if I were to be behind bars for a month. But I do

not get the support and encouragement for this from the commissioning editors. This is understandable to some extent—any editor will be scared to publish scrutiny of the judiciary for fear of contempt of court. Can't the media initiate a debate and usher a new set of policies/regulations which will render the judicial administration scrutinisable by the media?

IF WE LOSE THE TIGER...

If we lose the tiger, and alas! Much as it seems inevitable, we have to protect the remaining tigers at any cost, it will be doomsday. Think of that super earthquake and we are left to recreate civilisation and humanity's evolution.

Despite the power and pelf of Project Tiger, it sadly lacks teeth and has fallen short of guiding policy too. It is because of a lack of a land use policy that India is unable to enforce 33 per cent of the land mass as Protected Area for the remaining wildlife. Coupled with lack of political will, it is the Project Tiger—or national Tiger Conservation Authority which incidentally seeks to protect all the wildlife and the ecosystems in the name of the tiger—which has failed to impress upon the political leadership the need to protect habitat as inviolate as possible. Despite notification of 28 Tiger Reserves, 90 national parks, and around 600 wildlife sanctuaries, we are still unable to save the rapidly disappearing faunal diversity. Of course factors such as inbreeding and high feline mortality are significant inhibiting factors in tiger conservation, but there is certainly a need for a policy to separate man from core-areas of Protected Areas.

According to the interim report estimating tigers in Central India—called 'Status of the Tiger and Co-predators in Central Indian Landscape'—undertaken by the Wildlife Institute of India, tigers that have been sighted and documented were always sighted only in the core areas that were devoid of all kinds of anthropogenic conflict and pressures. Apart from the estimate that there are indeed less than 500 tigers in Madhya Pradesh, there are very interesting observations—that most of the tigers sighted were spatially quite isolated from all kinds of anthropogenic pressure. Where the tiger stalks there are over 15,000 species of plants, 500 species of reptiles and amphibians, 2,000 species and sub-species of birds, some 30,000 insect species and about 410 species of mammals. Protecting this diversity is largely the ecological responsibility of the Royal Bengal Tiger. The forest really resonates with myriad alarm calls where the tiger stalks. But the tiger's desperate call for definition of judicious land use policy is going unheeded in the deafening chaos of the debate surrounding the



Forest Rights Bill 2005. Alas, the tiger finally lost out to the forest dwellers robbing the endangered feline the sanctity and safety of its own home on 1 January 2008!

Allowing Man to coexist with so many wild animals, in harsh terrain, that too in the name of protection of the cultural rights of the indigenous people or forest settlers, is nothing more than an unabashed socio political discrimination and an unpretentious lid to poverty eradication. It becomes an unapologetic sustenance of poverty.

NOT INDIGENOUS

Most of the forest settlers in India are not of any indigenous peoples' clan but are largely descendants of the former servant class of the erstwhile royal families. The settlers' forefathers were settled in the hunting grounds of the erstwhile Maharajas and were given an upkeep allowance only. They were not given record of land rights or any kind of ownership of lands. After India attained Independence, the Union of Accession ended the miserable monopoly of the so-called aristocrats and the marginalised folk of the acceded territories hoped that fair-play and a socialistic ethos will better their lot at least in a democracy. But our blessed politicians would much rather play mischief on undefined turf, literally! How can man live amidst this wilderness where boulders and streams converge on his path and wild animals assault his livestock and sensibilities in a constant battle of one upmanship? I would not know where to start or end describing their hardships.

To begin with, these impoverished people live in modest straw huts propped by wilting bamboo. If they do not belong to any indigenous tribe, they would likely have built their dwellings in mortar but nothing more than that. By and large thatched roofs and straw huts are the norm. These fragile tenements barely offer them protection from the wilderness. They share their living quarters with cattle and livestock and dogs too, for fear of carnivores preying on their livestock. Their one room shacks barely offer them privacy in the sleeping quarters. Women suffer from lack of privacy, and with lack of access to water supply and sanitation, they suffer from serious hygiene related problems. They walk miles and miles to fetch a pail of water.

The womenfolk of the Gujjar tribes from the Hindala village inside the Ranthambhore Tiger Reserve in Rajasthan have turned out to be a hardy lot. They trek across a plateau in harsh sunlight and then gingerly climb down a cliff 400 metres in height to reach a source of fresh water.

From here they fetch 8 pails of water twice a day to meet the water needs of their enormous families. And when I had gone to report about their misery, I suffered from sunstroke, got dehydrated, became disoriented and fell faint. I do not know what happened to my blood sugar level at that point, but it was impossible to be back in my hotel in Ranthambhore by lunch time, and at 1.30 p.m. my stomach was impossible to quieten. I openly admitted that I am diabetic and was so hungry that I could eat anything. I pleaded with the village elder to make available something for me to sustain myself for 3 hours after that. The men-folk in the village did not know what the hell diabetes meant! My guide explained that it is an illness which causes hunger to people suffering from it! The village men-folk told me in no uncertain terms that I should walk down the cliff with their women to fetch pails of water for 2 days and I would be cured of diabetes! I should surely give it a try. What if a woman from their village is on her period and cannot whittle the responsibility of fetching 16 pails of water everyday from a fresh water pond below a 400 metre cliff? The women folk are confronted by hyenas and reptiles on their way to and from the pond. The children from his village too use the same cliff pathway to reach their government school in a nearby village about 13 kilometres away.

Lakshmi Narayan Gujjar in the Kankwadi Guada of the Sariska Tiger Reserve is a ruthlessly practical man. Says he, 'instead of giving us 3 hectares of land without irrigation facilities and very little money for construction of a house and no employment opportunities, they (the government) might as well allow us to continue living inside the forest. Here inside the forest after all we can live in peace without having to pay for water and unlimited natural resources.' Unlimited natural resources indeed, but his cattle graze on the same pastures where the cheetal, nilgai and sambhar graze. Cattle infected by Rinderpest or some other deadly virus pass on the viruses to the herbivores. Anthrax and Rinderpest are some of the most vicious threats to wildlife. As if the threat of infections is not deleterious enough, the cattle also rob the wild ungulates their food supply in the forest. If that same patch of forest is protected inviolate from all anthropogenic conflict, it serves the purpose of conservation far more effectively. I do not seek to paint a very romantic picture of biodiversity protection only for the rich urban denizens to marvel at, but, like I said earlier, biodiversity conservation has a far more serious undertone than the glamorous gaze of a striped tiger stalking—conservation of ground water sources.

Twenty-nine-year-old Lakshmi Narayan Gujjar got married in July 2007. His two room shack covered by a thatched roof lacks a toilet and

they fetch water from a well 2 kilometres away because the well in front of their house offers salty water. What will this do to the health of his family in the long run?

Even if land use policy is streamlined, land acquisition is complete and forests are contiguous, there is still the challenge of policing for protection to the wildlife. The shock to conservation is increasing because of the scandalous TCM markets.

At least 22 tigers were culled out of a premier Project Tiger Reserve in India in 2004. The disembodied parts of the tigers made way through the murky by-lanes of Tibetan markets and shanty towns in India to the back alleys of Litang in Tibet. According to Wildlife Protection Society of India which maintains a database, parts of which have been published in their 2005 report 'Skinning the Cat', seizures reveal more than a total of 877 tiger skins, 1,368 leopard skins, 1,566 otter skins, 1 fake tiger skin, 1 Lynx skin, and 1 rhino skin besides 3 kg of tiger claws, 14 kg of tiger canines, 10 tiger jaws, 60 kg tiger paws and 133 kg of leopard and tiger bones. There are other reports too by Wildlife Trust of India (WTI), CBI, and Environmental Investigation Agency, etc.

The database of WTI documents wildlife seizures on a case by case basis. The macabre list is bone chilling: Tiger skin—11, Leopard skin—112, Jackal skins—980, Jungle Cat skin—981, Common Fox skins—4, Red Fox skins—5, Desert Cat skins—19, Leopard skin—5, Wolf skin—1, Snake skin—25,800, Black Buck skin—6, Fishing cat skin—3, Leopard cat skin—2, Clouded Leopard skin—3, Lizard skin—2, Civet cat skin—2, Hill fox with tail—3, Jungle cat skin—5, Otter skin—202, Tiger Bones—280 kg, Leopard skin—28, Leopard skin with lining—1, Clouded Leopard uncured skin—1, Clouded leopard skin with lining—1, Tiger skin uncured—1, Baby tiger skin uncured in damaged condition—1, Crocodile uncured skins—5, Jackal uncured skins—6, Wild hare uncured skin—1, Mongoose uncured skins—35, Tiger skull—1, Leopard skin—3, Tiger skin cut pieces—2, Leopard skin cut pieces—5, Panther skin—2, Nails—3.

It is indeed very simplistic to say that the urban poacher or wildlife trader in Delhi or Mumbai sought the support of the forest dwelling villager or tribal to gain access to the core areas of forests where wild animals are sitting ducks in their dens. It is because the intelligent tribal youngster, full of energy, is not using his intelligence and energy in any constructive way. We, the urbane, educated folk have failed to evolve mechanisms for them to assimilate their energy into the urban mainstream. We have failed to educate them, take the best out of them. The intelligent

tribal boy has a lot of time literally on his hands when he is shepherding his cattle inside the forest. He knows the labyrinth of game tracks, the routes and behaviour of the wild animals. He knows how to mimic the calls of the wild animals. He understands the colour tones of the sky, and the whispering tones of the leaves. He knows when a natural disaster is likely to strike and he knows how best to save his skin. Granted this kind of traditional knowledge is utterly absent in the 'civilised, urbane' class, but pray let us either put to good use his traditional knowledge to further conservation or employ him better, so that his idle mind does not become the poacher's workshop.


TRADITIONAL KNOWLEDGE

We the evolved, tamed, educated and urbane lot have not exercised our imaginations to evolve means of harvesting the traditional knowledge of these indigenous peoples. They are a hardy lot, they know best the diversity of food grains that this blessed land offers. They know the hardships of cultivation, the merits of shifting cultivation and the demerits of the green revolution. They know how to beat stress, they have never known ailments like diabetes. Yet we have failed to harvest their repertoire of traditional knowledge but have instead turned a blind eye when we came to know that they were conniving with big time urban poachers. We the educated class are as much to blame as the politicians for not supporting the enforcement agencies in their vain attempts to nail the poachers. We the educated class are to blame for not punishing the political class that did not take wildlife conservation seriously.

When Sansar Chand Gihara, a notorious wildlife derivatives trader, was arrested by the Delhi Police in June 2005, he apparently revealed the names of a string of leading national politicians whose patronage he claimed. Why haven't we in the media investigated his political links?

Why have we in the media not investigated the string of cases hoisted against Sansar Chand in the past 30 years. It's a shame. Ironically his rise as a wildlife trader has been in the same years after the notification of Project Tiger. Isn't that a shame?

Of the 10 cases documented after investigations in the Sariska fiasco, at least 8 confessions allude to tribals living in and around Sariska laying metal jaw traps to maim the tigers that killed their livestock. In the 2 other cases, Sansar Chand has confessed to buying the skins of the tigers he had killed in Sariska. The cowardly killers would either kill the tigers by gunshots or by hitting the tiger's head with brittle wooden sticks (called lathis). This



innocent, unknowing tribal is nevertheless intelligent enough to know that a bullet-hole ridden tiger skin fetches him lesser remuneration than a skin without a bullet hole. So he is intelligent enough to lay a trap which is guaranteed to maim the carnivore be it the tiger or the leopard. After that the coward hits the carnivore on its skull till it dies an agonisingly painful death, with internal bleeding and haemorrhage inside its brain. Then the coward usually peels its skin and hides it away inside the forest very close to the spot of death trap for the tiger or leopard. Only after making a deal with the local liaison of Sansar Chand or any other wildlife trader he works for, does the poacher come back to retrieve his 'maal' (catch). By then, in all likelihood, the remains of the carcass would most likely have decomposed, and the forest officials in any case have no clue of the situation.

MAN-ANIMAL CONFLICT

I will now narrate another lesser known side of the issue of man-animal conflict. In the Western Ghats there are scores of people who have been mauled by black bears in the course of their daily routines. One man in Dandeli had his scalp peeled by a sloth bear. Another man was attacked by the bear so viciously that his wrist bones cracked and after the dismembered left hand was stitched back into shape, it is shorter than the right and he has lost the dexterity of his wrist's movements. Another tribal, a Siddi man in Dandeli, was attacked behind his neck by a black bear. Another tribal man was attacked by the bear and he suffered a severe bite on the back of his thigh. Another Siddi tribal man on the Goa Karnataka border endured pulverisation of his entire rib cage by the sloth bear. One more tribal man's ribs were broken by the notorious bear. There are at least 7 victims of bear attack in the Uttar Kannada district of Karnataka alone in the Western Ghats. A young tribal woman was once herding her cattle when she unknowingly disturbed the habitat of a nursing mother bear. It attacked her so viciously that her entire lower jaw was ripped off. Incidentally all these 7 victims of black bear attack were herding their cattle and willy-nilly disturbed the habitat of the bears.

Pray why should equal citizens of India endure such torture in remote areas meant for wildlife?

In the Bhadra Tiger Reserve, man-animal conflict was a sore cause for tensions with the forest department. In 1995 Parvathi Chandra of the Maadla village was being taken in a tractor to the Mallandur (nearest town) primary health care centre for childbirth. The tractor driver was

negotiating a fragile Bamboo bridge that had been tied by flimsy ropes across the swollen Somavahini River. The weight of the tractor was too much for this flimsy bamboo bridge and the ropes got untied. The rusting tractor must have started flooding. In utter panic, Parvathi delivered the baby in the tractor itself. This childbirth surely merits an analogy to the birth of Lord Krishna in terms of drama! Both mother and baby were saved, and theirs is truly a story of happily ever after. The child now goes to school in the resettled township, M. C. Halli, and Parvathi Chandra is a proud agricultural labourer with a bank account.

Mohi-ud-deen of Hippala village, in the core area of the Bhadra Tiger Reserve, was less fortunate. On the night that it was his turn to guard the crops, his torch battery burnt out. His cousin ran over to the shop to bring batteries. But by then Mohi-ud-deen heard the elephants trumpeting and ran out with a stick to chase the beasts. But the roaring, marauding elephant chased him back. He ran for his life screaming, but, just a few paces before the house, he was mashed into pulp by the angry pachyderm. After this ghastly incident, many of the Muslim families left Bhadra for Mallandur or Chikmagalur. They did not even inform the officials that they were migrating—such was the panic. Only two Muslim families were left in Hippala. The mosque could no longer function without a quorum so the mosque shut down and the Mullah migrated. Without the mosque the Muslim families could not get their hands on *halal* meat. Thus, these two families in Hippala were forced to remain vegetarian for the best part of two years, unless they bought *halal* meat from far away Chikmagalur. 'On many occasions we have eaten stale meat and rotting vegetables when we lived inside the forests,' says the cousin of the late Mohi-ud-deen.

There are innumerable cases of people being killed by angry marauding elephants in India. The Karnataka Forest Department has documented the number of cattle lifted/killed by carnivores in protected areas. The documentation is part of a database that seeks to substantiate man-animal conflict to seek and advocate the need to separate living spaces for man and animal. Perhaps the forest departments in other states too have documented cattle deaths at the jaws of jungle carnivores, or at least they have to. It serves to document the man-animal conflict, if not anything else.

In the Billigiri Ranga Temple Hills Wildlife sanctuary, the late forest officer P. Srinivas who was killed by forest brigand Veerappan, had employed the tribal people to build a forest guest house, just to wean them away from the influence of the notorious forest brigand. The guest house has been built on a rock cave which was the home of a black bear.



The cave now serves as a foundation for the guest house and houses the wireless station of the forest department. Sterility of its home infected by the presence of humans, the traumatised bear left its residence and became homeless in the wilderness of the hill range. Its dignified behaviour can teach us a lesson or two in decorum and civility. Even to this day, 18 years after the guest house was built, it comes to the cave once in 10 days and yawns in nostalgia spends a few minutes to an hour and goes back into the jungle. The trauma that has been caused by its eviction can at best be imagined, at worst be calculated for an imminent onslaught. But to its credit, it has never once attacked the guards who man the wireless station.

The administration and the NGOs must document the areas of man-animal conflict and quantify them to help evolve a future policy for land use and uplifting the downtrodden forest dwellers.

Careless smokers throw their half burnt cigarette butts which cause forest fire to the extent of 98 per cent in India. In 2005, a British tourist in a national park near South Africa's Table Mountain was caught on camera for carelessly throwing a burning cigarette butt into the bush. Within minutes the flaming forest was the cynosure of the administration's focus, and by the time the car came out of the forests, the park gates were locked, and the guy is still in a prison in South Africa's Cape Town. Pray when might India have this kind of political will and infrastructure for such awesome foolproof enforcement? It is an inspiring example to emulate honestly.

VERY EMOTIONAL

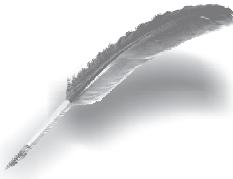
I refuse to apologise for being very emotional about wildlife conservation issues. There is space in the media today for a healthy debate about the tribal rights Bill/Act and the merits and demerits of taking development into the forests.

How many clans of indigenous peoples are actually totally dependent on the forests to justify their continued existence inside Protected Areas? Let us see how much they are dependent on forest resources.

Eighty-five per cent of the forest dwellers buy unpolished white rice from the Public Distribution System outlets where they get subsidised rice. Their attempts at shifting cultivation are severely restricted by the forest conservation laws, rightly so. Their staple diet is largely rice or whole wheat breads like Chapattis and Naans. They also buy Millet, and other food grains. Ironically it is because of the media onslaught that

our indigenous folk have forgotten the legacy of agro diversity and are inviting disorders like diabetes. They do not buy vegetables, but yes they do buy chicken or fish occasionally. For milk products they usually depend on their own cattle. They do eat tubers, not that they do not. But these roots and tubers, fibre, fruits and leaves are all seasonal supplements. They know how to store Amla Murabba jam in a bamboo container in the absence of a fridge, but they do not depend on any such forest produce for sustenance.

The Anthropological Survey of India has to document their dependence on forests and its extent. This should have been done even before the debate preceding the drafting of the Forest Rights Bill. Who in India today lends voice to the debate ushered in by the silenced roar of the tiger?



SECTION FOUR
Environment and Water



The Media's Role in Water and Sanitation

Sahana Singh

The media has faced considerable flak in recent times for going on a collision course with governments and multinational corporations. It has been accused of taking the side of environmental activists and Non-Governmental Organisations (NGOs). But it is also being increasingly recognised as a vehicle for advocacy which serves public interest.

HANDLING WATER WOES WITH THE SAME URGENCY AS A WAR

The problems that afflict the water and sanitation sector of Asia, particularly South Asia, are so widespread and deep-rooted that it is becoming quite imperative for the media to shed the role of a passive observer. 'When there are people without piped water and sanitation, you have a disaster at hand and you have to handle this on a war footing,' said water expert Arthur McIntosh, at a stakeholders meeting convened by Asian Development Bank in June 2007. 'Old rules need to be put aside to get the job done quickly,' he asserted.

During the devastating tsunami of 2004, which killed 3,00,000 people, the world community responded with alacrity and over US\$10 million was pledged to help the ravaged communities. Yet, a situation which leads to the death of 10 times the number every year does not evoke more than declarations of goals and targets. The World Health Organisation estimates that 40 per cent of the world's population (about 2.6 billion people) lacks adequate sanitation, resulting in at least 1.8 million deaths every year, mostly children under the age of five. One wonders if it was better to have all these sanitation-caused deaths at the same time!



AWAKENING POLITICAL WILL

It has become quite evident that poor governance is the root cause of all problems in developing countries. Governance has been but empty rhetoric in most of Asia with only a few islands of excellence such as Singapore. A case in point is urban India, where poor quality of water supplied intermittently has been accepted as a way of life.

A lack of political will has particularly hampered the cause of water and sanitation, not so much a lack of financing or physical resources. It is this political will that the media needs to awaken in the coming years.

Once there is an improvement in the water and sanitation facilities, virtually everything else follows—health, education and economic empowerment. There are documented cases of a reduction in the drop-out rate of girls from schools when toilets are provided for them. When individual house connections are made available, girls and women do not need to walk miles or queue up at community taps, thereby sparing them some time to study or engage in income-enhancing activities.

HIGHLIGHTING SUCCESS STORIES

One allegation frequently made against environmental journalists in general is that they spread negativity with their stories. 'Alarming media stories about the state of water and sanitation tend to create a sense of resignation and fatalism among the public,' observed Dr Seetharam, Principal Water and Urban Development Specialist, Asian Development Bank, at a media workshop in 2007. 'On the other hand, success stories about overcoming obstacles create a tide of positive energy,' he said, pointing out, 'More water champions begin to emerge as a result.'

Indeed, today there are more success stories centred on water and sanitation appearing in newspapers, magazines and websites than ever before. The public awards given to achievers in this area are also responsible for greater media coverage.

Sunita Narain, Director of Centre for Science and Environment, got substantial media coverage of her battle with Pepsi over the alleged contamination of the cola with pesticide-tainted water. The storm raised by Narain led to widespread debates about the monitoring of water quality standards in India. She subsequently won the Stockholm Water Prize in 2005. Joe Madiath, whose organisation Gram Vikas won the Kyoto World Water Grand Prize in 2006, was interviewed extensively by the media and his contribution to community managed programmes in Orissa was highlighted.

GETTING TO THE CRUX OF ISSUES

Many water experts feel that the media tends to toe the line of vociferous NGO groups rather than getting to the crux of the issues. Dams are equated with disaster. Privatisation is construed to mean a sell-out of assets and inflation of tariffs. The failure of some high-profile Policy Support Programme (PSP) projects in different parts of the world is taken as an indication that the concept itself is flawed. This is like throwing the baby out with the bath water. The point that the public sector can actually work in partnership with the private sector and that the model of this partnership can be tailor-made to suit each country's requirements has somehow been missed by the general media.

Instead of initiating debate about the best ways to finance the water sector so that the current and future needs of the people are taken care of, the media has actually led to governments sitting back and doing nothing. Governments have discovered that remaining in a state of inertia is the best way to avoid media glare and civil unrest.

Traditionally, governments and owners of municipal utilities hold tariffs down to the extent that the utilities make an operating loss then cover this loss through debt. The debts mount for years and are eventually written off. This method of financing offers political advantages. 'The scale of the debt gives politicians in the public authority, which is lending the money, direct control over the utility,' says *Global Water Market 2008*. 'This enables them for example to guarantee "social employment opportunities" for party supporters or in the distribution of large contracts,' it observes.

Although subsidies do enable utilities to keep their tariffs down, they do not encourage long-term investment in the water sector. A fact that cannot be disputed is that full-cost recovery tariffs are the best guarantee of a utility's financial independence and ability to invest in future needs. Subsidy encourages corruption and the problem is compounded where water is scarce and needs to be rationed. If a utility loses money on every cubic metre of water it sells over the counter, its management will quickly find a way to make a profit by selling under the counter, according to *Global Water Market 2008*.

The example of Tirupur in India illustrates the tremendous potential of innovative financing that can be utilised by public-private partnerships. Most municipal water utilities in the developing world are considered bad risks in the local credit market, and must therefore rely on the favour of the central government in order to borrow money. The solution adopted

in Tirupur was to introduce credit support instruments, whereby the funding agency would guarantee a bond issued by the municipality, ensuring that it was attractive to investors in the local capital markets. This successful model used for the Rs 10.23 billion project provided water to nearly 1,000 textile units and over 16 lakh residents in Tirupur and its surrounding areas.

RECOGNISING INTER-SECTOR LINKAGES

The Indian media needs to critically look at the water and sanitation sector in its entirety instead of only reporting on the issues pertaining to end users. It needs to get the views of experts in various fields inter-connected with water such as finance, energy, development, health, women's issues and law, apart from those directly involved with water such as the suppliers of treatment systems, municipalities, industries and civil society.

In the past, governments have caused immense damage by 'formulating policies in one sector without adequate consideration and coordination with policies in other sectors,' as Asit Biswas puts it. Dr Biswas, author of *Asian Water Development Outlook* and winner of several international awards, was referring to the practice of subsidising energy for farmers in order to give a boost to agriculture. This has resulted in farmers pumping more groundwater than needed. Eventually there was a steady decline of water levels and in the process many public electricity boards suffered heavy financial losses. This could have been avoided if the inter-linkage of water and energy sectors had been taken into account.

The media has an important role to play in highlighting these inter-linkages considering that most dailies today have different departments dealing with politics, finance, health, environment and others.

UNDERSTANDING THE SCIENCE BEHIND IT ALL

Often, journalists shy away from what they perceive as heavy, engineering or technical jargon. 'The press should strive more to help the public understand the scientific and technical aspects of a problem better, rather than just place a major emphasis on the political aspects,' said Stanford professor Dr Perry McCarty in an interview with *Asian Water* magazine.

Journalists would do well to take the time to comprehend the process of pumping water from a source, purifying it and distributing it to users as well as the process of transporting waste water back from users to

receiving water bodies after treatment. Thanks to the Internet, there is no dearth of information available on water. A lot depends on journalists' understanding of the use and disposal of such a valuable, life-giving resource.

In a rapidly urbanising Asia, millions of people are using consumer goods such as detergents, dishwashing liquids, toilet cleaners, lotions, cosmetics and fragrances which are reaching water bodies and most likely coming back in drinking water. Not only that, pharmaceuticals such as antibiotics, anti-depressants, hormones and pain-killers are also being excreted from human bodies, and thus contaminating rivers. In view of the rise in cancers, allergies, miscarriages, behavioural disorders and other new diseases, a link has been suspected between them and 'emerging chemical contaminants'.

Journalists would be doing a major service by uncovering these stories as well as looking at preventive measures that include substituting harsh chemical cleaners with natural cleaners such as lemon juice, vinegar and baking soda. Writing features that advocate nature-friendly lifestyles and the use of products that are biodegradable and do not persist in the environment would have far-reaching consequences.

EXPLODING MYTHS

There are plenty of myths about the water sector, which the media should go all out to expose. One of the big myths is that governments do not have enough money. 'Aid has been providing more than approximately US \$5 billion a year for water and sanitation,' says the WASH Guide for the media issued by the Water Supply and Sanitation Collaborative Council (WSSCC). 'And governments in the developing world have been spending about as such again. But it is how well the money is spent that matters.'

Another myth is about 24/7 water supply. Until 2007, India had the ignominy of not having a single town or city with 24/7 water supply (in 2008, four pilot areas in Karnataka were only testing this facility). Surprisingly, neither the public nor the media has applied pressure on governments to get a continuous water supply; rather the focus has been on increasing the hours of supply from say 2 hours to 10 hours a day.

Yet there is no dearth of examples of Asian cities with 24/7 water supply—Bangkok, Beijing, Ho Chi Minh City, Hong Kong, Kuala Lumpur, Male, Phnom Penh, Seoul, Shanghai, Singapore, Tashkent and Vientiane. 'Other developing countries also suffer from intermittency of supply but none can approach the magnitude of India's 300 to 400 million urban



citizens living under these conditions nationwide,' says consultant Stephen Myers in an article in the *Asian Water* magazine (September 2006).

There is a belief among laypersons that continuous water supply is not practical. It is thought there is not enough water for 24/7 supply and that even if implemented, it would lead to more wastage of water. All these are but myths. Not only is continuous water supply feasible in Indian cities but combined with a good programme to check non-revenue water and appropriate water pricing, it can actually help households to eliminate the costs they incur on installing storage tanks, pumps and water filters.

The building of Delhi Metro some years ago exploded a great myth. In the highly politicised and slow-to-reform environment of Delhi, building such a rail network seemed well-nigh impossible. Yet the Indian stereotype of cost and time over-runs was surmounted to commission a world class transportation system well before schedule. The makeover of India's water and sanitation services, if it happens, would be an even bigger story.

FINALLY—ASKING THE RIGHT QUESTIONS

The ability to ask the right questions is a crucial attribute for the media to have—it can mean the difference between action and inaction. Is the subsidy on water really helping the poor? Are the best materials being used to construct pipes and sewers? Under what circumstances does sewage get mixed with water lines? What happens to all the fat and grease that goes down sewers? What happens to the sludge that is coming out of treatment plants?

These and many other questions need to be raised by the media and investigated. Oscar Wilde once said, 'Its failings notwithstanding, there is much to be said in favour of journalism in that by giving us the opinion of the uneducated, it keeps us in touch with the ignorance of the community.' Sarcasm apart, the fact remains that the visual, print, web and audio media are the major opinion-makers in today's world. If they are on the side of sustainability and environmental harmony, there can be bliss without ignorance.



Water Journalism Warrants Better Attention

Shree Padre

Vanjiyoorakonam is a hamlet in the outskirts of Trivandrum, Kerala. Most of the people here are poor. Seventy families manage with 45 open wells, most of which remain dry for four months in a year. Surprisingly the well belonging to Ratnadas–Vijayamma doesn't dry at all. This family provides drinking water to 10–12 neighbours in the summer.

Why does Ratnadas' well have ample water? Every year, he directs the run-off from the nearby sloping road to the basin of his coconut tree. Interestingly, the tree basin 'drinks' all that water. But so far, the neighbours who take water from Vijayamma's well haven't asked why her well always has enough water. Nor has it occurred to Vijayamma to share the secret.

In fact, it doesn't cost any cash for Ratnadas to 'feed rainwater into the land'. He digs a small channel to divert the rainwater to their tree basin. If only Vijayamma had explained this process, otherwise called 'rain water harvesting', all neighbours could have followed it. Catching rain where it falls—in-situ rain harvesting—is a low cost method affordable to even poor people.

The role of the media lies exactly here in sharing such vital information with people and making the society water literate. But for that to happen, mainstream journalists have to be sensitised first about water issues, problems and the possible improvements rainwater harvesting and allied concepts like water reuse, recycling, etc., can make.

MAJOR WATER CRISIS IMMINENT

In the whole world, water, the 'most precious liquid', is increasingly turning to be a scarce resource. At Cherrapunjee which receives highest rainfall in India at 12,000 mm in summer, water trade raises its ugly face.



A situation where water has to be provided through tankers is a symptom of a still serious and complex disease.

Imagine this prospect: Within 20 years large parts of our country could be facing Ethiopia-like famine conditions every year. This is no wild guesswork. It is a scenario based on rigorous research by Sri Lanka-based International Water Management Institute (IWMI).

‘India is in the throes of a major water crisis and the country seems least prepared to meet it,’ contends Dr Tushaar Shah, principal scientist of IWMI. IWMI predicts that a large chunk of India could by 2025 face the same plight—absolute water scarcity—as parts of Sub-Saharan Africa do now.

A decrease in agricultural production due to water scarcity in a big country like ours and China would cause considerable demand for grains which in turn may lead to an increase in world market prices.

Well, this is just one of the many implications. Water scarcity would affect the human life and environment in a very adverse manner. As per the report of World Health Organisation (WHO), every year in the whole world, 3.4 million people die by drinking contaminated water. Many more suffer hardships and financial losses by water-borne diseases. As per the estimate of a UN study, 4,000 persons die every day from contaminated water—the ‘silent killer’. That’s why social workers always describe that providing safe drinking water is the biggest development for any country.

If one goes on searching, we in this country have location-specific lessons on rain harvesting to suit all agro-climatic zones. We have very sustainable systems in our ancient tanks, forts and even in deserts. Unfortunately, still many of such systems are not documented or are ill-documented. In fact, rain harvesting was very much here since many centuries. We have lessons enough to share with other third world countries as well.

Due to the advent of easier looking technologies, pipe water, tube well digging and the state taking up the responsibility of water supply, people of our country started taking water for granted. Today, if you go to the nook and corners of the country, even in villages where wonderful, sustainable systems of rain harvesting or drought proofing were practised in olden times, the locals seem to have forgotten these now. Forget about the younger generation who didn’t have an opportunity to see such systems in good condition, the elders who enjoyed the benefit once also seem to have added it to ‘the bygone era’.



DEARTH OF INFORMATION

We have dearth of right kind of information in the form of books, videos, etc., that can teach the layman how water can be conserved in the local situation or how rain can be caught. Strengthening common man and communities to shoulder the responsibility of sustainable and safe water is not given the importance it deserves.

Take the example of open wells that are there in many parts of the country. For nearly 4,500 years, these have been serving people. But in the last 50 years, this structure is being neglected, abandoned and refilled with soil. If only a booklet can explain the possible methods to increase the water availability in a well or to revive a 'dead well' or at least to reuse a dried well as a percolation pit for the surrounding community, it can encourage the local communities to shoulder the easy, low-cost revival process.

Unfortunately, the much needed priority to be given to mass awareness about water and to inspiring local communities to take up water harvesting and management is still in an infantile stage. Such efforts should have been made in all the states and languages.

When you view the issue from this background, if there is a focussed effort to make our mainstream media gain a working understanding of concepts like water conservation, rainwater harvesting and related subjects like water reuse, recycling, etc., it would help in a big way. This has to be followed up by training in writing on water issues. The media can contribute considerably in making the society water literate. Time has come when newspaper managements and journalists have to take water journalism more seriously.

Since water is such an important resource, why can't we have specialists covering water matters like we have sports specialists, crime specialists etc? Big newspaper houses might consider grooming one of their hand-picked staffer in this field.

SUCCESSFUL MEDIA CAMPAIGNS

Let us look at some media experiments on these lines. Let me start with our own experience with *Adike Patrike*, a unique smalltime Kannada monthly, now 20-year old. We started a campaign on rainwater harvesting—a pioneering effort by a media group in Karnataka—by publishing a series of success stories from 1996 to 2004. We had two main criteria for selection of stories. We preferred stories of successes of the common man,



without using government aid or subsidy. Secondly, we preferred stories about such methods used by the common man that were replicable at least in that neighbourhood.

At that time, we didn't have many success stories of rainwater harvesting in the near vicinity. So, we brought 'seeds of rainwater harvesting' from Rajasthan, Gujarat, etc. Initially, nobody took them seriously. 'It might be possible there, but not here' was one of the main reactions. Second: 'if everybody practises it, that might benefit. A few persons harvesting rain wouldn't help at all.'

We realised that we had to convince the readers that 'it is possible here too' and that 'even a single person can effect some change'. People-oriented rainwater harvesting was what our readers wanted. We started catering stories that had this slant. The results were amazing.

Hundreds, nay, thousands of farmers used these simple ideas and got success. More than 30 people from various walks of life—teachers, farmers, doctors, etc.—started creating awareness about water. After nearly a decade's campaign, we started 'taking harvest of rainwater harvesting stories' from our own region and from our very readers as well. If it was five rivers that were reborn in Alwar district of Rajasthan, that inspiration made a small stream, Adehalla, near Thirthahally, to flow perennial after a gap of 4–5 years, thanks to the rainwater harvesting efforts of a local farmer, Saru Dinesh. If a small magazine like ours can make such unbelievable impact, how would it be if our mainstream media takes up such issues?

Such an example soon followed in Malayalam. *Malayala Manorama*, a daily with over 10 lakh circulation, launched a campaign on rainwater harvesting titled Palathulli (many drops) three years ago. Phone-in programmes and seminars were conducted in all its 10 editions. A Road Show visited more than 300 centres of this small state.

Apart from regularly publishing articles on rain harvesting, the daily freely distributed two colour booklets—small guides—to all its readers. An educative video was shot and distributed. Schools that made good arrangements to harvest water were given cash awards. This campaign made the Keralites well aware about the concept of rainwater harvesting. The government and banking sector were also alerted. Banks started loan schemes while the government came out with many projects on rainwater harvesting.

In North India, *Rajasthan Patrika*, a popular Rajasthani daily, carried out a campaign on rainwater harvesting. As a result, one and half volunteers offered *kar seva* for two months and revived 388 tanks and wells. A sum of Rs 5.18 crore was gathered by way of contribution from different institutions for this purpose.

Digant Ozha, a veteran journalist from Maharashtra was working in mainstream media. After realising that justice is not being done by the mainstream, he returned to his home state Gujarat and is running a small Gujarati monthly, *Jal Seva*, devoted only to water issues.

EXPLORING THE LINKAGES

Many people believe that water is a very 'dry' subject. But if you view it holistically, water is related to many, many issues in our daily life. There is no life without water. That's why people refer to it as *jeevjal* and *amruth*. Water is in fact money; it's health. For those who get only contaminated water for drinking, clean water means health, savings on medical bills. For farmers and industrialists whose production is affected by scarcity of water, getting more water means more production and higher income. Yet, this *jeevjal* can be *mruthyuvahak* too, if only it is taken for granted. Wherever industrial effluents and pesticide residues are dumped into the water bodies, that water would become the agent of death, maybe slow death, which is more cruel. The subject of water is so wide, important and deep that to do justice to that we need a battalion of water journalists.

Today administrations are talking only about providing adequate quantity of water. But adequate quantity of water is not enough; people want safe water too. If you go one step further, from a poor man's point of view, at what time and how this water is provided is also very important. For example, if a daily wage earner has to sacrifice a day's work to queue up in front of the tap, it's really a big loss. Instead, if water is provided when he can collect it, during off time, or still better, if it's provided in a 1,000 litre tank, the family can manage it for two days sans any tension. We have to view these differences with the sensitivity they deserve.

One of the pioneering morale boosting milestones in watershed development came from Alwar district in late 1990s. Under the stewardship of Magseysey award winner Dr Rajendra Singh's Tarun Bharat Sangh, five rivers flowing only few months after monsoon started flowing round the year from the year 1995. A village woman, when asked by a visiting journalist, quipped, 'Now that water has come, everything else will.' How meaningful this one sentence is!

IF WATER GOES...

To understand this woman's statement, one requires a little bit of local background. Living conditions of these villages were very pathetic.

Womenfolk had to walk 7–8 kilometres to bring the daily requirement of water. As there was no water to grow crops, all the able bodied men had migrated to cities in search of jobs. Whatever small savings they sent by money order had to keep the oven lit back home. Grains and vegetables had to come from other districts. Folk songs, entertainment and happiness were only nostalgia for these poor villages.

Now, when the water is back, all these blessings of good life have returned. So when this woman referred to 'everything else', she might have meant her husband and near ones who were driven to the city, their old happy married life, folk songs, local food production and the old prosperity. Dhanua, an old man who returned to the village after the river rebirth, used to tell others, 'You might have got freedom in 1947. But I got it only now, in 1995, after about five decades, when I could cultivate grains for my family in the land my father has left for us.'

We often read news about ground water decline saying the water table is going down by 2–3 feet every year. Such news has become so common that it goes unnoticed. But if we carefully analyse how this declining water level affects the local communities, the news analysis would make more impact.

Let us speculate the fall outs of such a situation. The pumping costs start increasing. Cost of digging new wells and other water bodies also escalates. People might have to abandon their open wells and invest heavily on bore wells. Agricultural production shows a downward trend. Slowly, realising that it is very difficult for small farmers to continue agriculture there, families might be compelled to migrate to cities after selling their lands. As the depth of bore wells go deeper and deeper, the quantity of total dissolved salts (TDS) in water increases. This will have an adverse effect on public health. Getting drinking water would become difficult for poor families. Safe water might become a mirage for the have-nots. For the first time, 'water trade' might start. If we alter the Rajasthani woman's statement a bit, we can say: 'If water is gone, everything else will be gone.' Paradoxically, this bitter truth holds good for even some of the areas with heavy rainfall like the foothills of the Western Ghats.

MELTING MENTAL BLOCKS IS A REAL CHALLENGE

The biggest challenge a water journalist has to face is to melt the mental block that readers have about rainwater harvesting and allied subjects. This requires patience, persistence and time. It's not a task that can be

fulfilled in a day, month or year. It needs years of efforts to bring in the change in mindsets.

In the context of rainwater harvesting, they always tell that 'we have to give opportunity time for rain to percolate'. Similarly, for readers to realise that rainwater harvesting is beneficial to the self and the society, we have to allow opportunity time. Of course, one can use strategies or social catalysts. Yet, we shouldn't hasten to see results. It requires a longer time gap, say at least half a decade or so.

There is an argument that unless and until policy changes are brought about, water sustainability can't be achieved. Of course, this argument has a rationale. Yet, reams and reams are written on the necessity of policy changes in public water distribution and management. Unfortunately, much hasn't changed. Let us start seeing the whole issue from another angle. Only if we convince the ordinary man that the solution lies in people-centred or community-centred water management, would we be preparing the grounds for policy change. Or, we would be encouraging the people to set up models that would be sustainable and be a new kind of example for the government and people's representatives to take note of and consider.

INSPIRATION VALUE

It is with this background that we have to gauge the importance of common man's success stories. In fact, it has tremendous inspiration value. According to me, there are three reasons for this. One: because of their low-tech nature, people feel that it is doable. Second: the low cost or no cost attraction. Once, after visiting Idkidu, the 'water literate' village near Puttur in Karnataka, a farmer called me up with excitement. He wanted to have an awareness programme on rainwater harvesting in his village. I asked him what it was that made him so impressed. 'There is nothing that Idkidu people have done,' he replied, 'which we can't do.' Three: Among those who positively respond and cross over to the next stage, implementation, common men rank the highest, above VIPs, people's representatives and those who are in the upper layers of the society.

In issues like water conservation, control of water pollution, etc., we can't hope to bring in sustainable results without encouraging people's participation. It would be illusory to assume that the government alone will bring about positive change, only through legislations and strictures. As such, it makes sense to instil confidence and inspire the common man to become water literate.



How should we present our success stories? A few writers, especially those from academic background, give more importance to technical details and the 'how to do it' part. Though this is important, if it is only statistics-ridden hard technological detail, that tends to repel the reader. It is the human interest that attracts everybody. Once you use this as an enticement, the technical details can follow. Let these be very simple, crisp and presented in such a way that anybody can easily understand them. Readers easily grasp and remember the information that is blended with human plight, suffering, happiness, etc.

If you examine carefully, it is these human interest details that distinguish one success story from the other. If 'how to do' part of the story is its skeleton, these human interest stuff comprise its flesh and blood. Two success stories may contain the same method of rainwater harvesting—allowing the roof water to the well. But if the 'before' and 'after' experiences of the two families are different—they have to be because no two success stories, like no two patients, are identical—that becomes two different stories.

In the borewell artificial recharge success story I made about Mandovi Motors, Mangalore, the main highlight is that now after washing the cars, the water doesn't leave back irritating blemishes on the glass and body. Through this, I was able to convey the message to the reader that rainwater harvesting not only brings quantitative change in water, but qualitative as well. One more message was that by digging deeper and deeper, even in coastal belt, the TDS has increased to an alarming level. Similarly, while narrating the success stories, we can include messages to the reader about how to undo the harm we have caused to the nature—like how to check soil erosion, deforestation, excessive tapping of ground water, contamination of water bodies, neglect of traditional water harvesting systems, etc.

SELECTION OF STORIES NEEDS CARE

The success stories which we highlight should be inspiring to the readers. It would be better if these are simple and adoptable. Complex and expensive methods wouldn't attract common readers.

Not only the methods, but even the photograph or illustration we select should be easy to understand. It is always better to avoid writing and showing techniques that might mislead people. Let me illustrate this with a small example. Recently, I sent a photograph of Vetiver float to a Vetiver expert. Vetiver float is nothing but Vetiver plants held erect by a raft-like

structure. These plants can survive without soil and absorb nutrients and contaminants, thereby purifying the water.

Though generally they use bamboo splits to make these sort of floats, for convenience in the photograph I sent, they had used narrow PVC pipes. 'There are two mistakes in this float,' the expert commented.

First is that you should always use a strong material for float construction so that it doesn't turn upside down once the plants grow. Secondly, thin plants are used here. For the purpose of wastewater treatment, you have to select plants that are pre-grown in a nursery bag and have developed thick root system. Otherwise the result will be pretty late and delayed.

No doubt, though inadvertently, by using this photo earlier, I might have misled some readers!

Generally, a success story of area B doesn't stand much chance to see the light in the same publication if a similar one—using similar method—has earlier appeared from area A. The editor would brush it aside saying, 'This is like the one we had already carried.' But for creating mass awareness of water, though it amounts to slight repetition, there is a purpose in carrying similar looking stories from different regions. A mental block that most people have regarding rainwater harvesting is that it is not possible in their area. They always dismiss the idea saying, 'It will work in Rajasthan, but not here', or 'In Dharwar area it might succeed, but not here' and other excuses like that. I have noticed that even such people get motivated if they come across a local success story. Because it is a live example that convinces them that the concept can work locally too. Yet, while writing such a repetitive looking story, one can try serving old wine in a new flavour and a different-looking bottle.

TRADITIONAL SYSTEMS IN-BUILT FOR PEOPLES' PARTICIPATION

We have a great wealth of traditional water harvesting structures (TWHs) in this country. There is no exaggeration in late Anil Agarwal's statement that 'the country's key for water sustainability lies in these traditional water harvesting structures': *johad*, *madaka*, *ahar* and *pine*, tank, *eri*, *katta*, *beri*, *nadi*, *oddu*, etc. Each state has its own TWHs. If there is a community will, these can be rejuvenated to a certain extent wherever possible. Interestingly, if renovated, most of these structures will give almost the same benefits as it was in the bygone eras.



The important point to note is that all these TWHS are possible only with people's participation. As such rejuvenating these structures would mean roping in people's participation. Though it needs considerable persistence and effort, the older generation reacts very positively to such moves. If the older generations come forward, that makes the younger people also come to the fore. In a nutshell, if reviving TWHS is possible in any area under selfless and able leadership, it would pave the way for uniting that society much closer.

Wherever the communities have shouldered the responsibility of local water management or taken part in mass water conservation activities, we can see the change in the status of water. Such areas generally don't suffer from water scarcity. Once the local people realise and own up any water harvesting structure, the road to water sustainability is not far off. The 'water works' that are built with community resources—albeit it's a very small percentage—and sweat never end up inferior in quality. Moreover, if it's a traditional structure, they themselves know how to maintain or repair it if and when necessary. They never sit idle for the government's rusty machinery to act. The works done with community decision invariably remains need-based.

If we have to conserve water in a big way, we have no other option than conserving the topsoil and forests too. *Jal, Jameen and Jungle* have to be given equal importance. As such, the term water journalism can't be restricted to water conservation or rainwater harvesting. It has to focus on allied subjects like soil erosion control, afforestation, sanitation, etc. If you view this from the rural perspective, issues like right crop selection and drought proofing need to be attended. That way, isn't water related to many, many aspects of human life?

Water saved is water earned. As such subjects like water re-use, water recycling, micro irrigation, water saving tips, etc., also deserve top priority. The diffuser irrigation, followed by grape growers of Maharashtra and Bijapur, an innovation over age-old pot irrigation, saves 50 per cent of water. Thirumaleshwara Bhat, a farmer at Idkidu near Puttur, lives 5 months a year by rainwater alone. Only after that he lifts water from his open well. Such examples, though smaller ones, can be food for thought for many others.

BACK-PATting

Years ago, I had asked a successful rain harvester, a farmer from a Hassan village, whether he was unaware of the concept till then. 'I knew it from

sometime. But there was nobody to give me moral support to experiment on this. The magazine article gave me that support,' he had replied.

Yes. The media can lend a lot of strength to somebody to take up an experiment that's new to the surrounding society. Its human tendency to make fun of people who start experiments that others think are impossible.

Who has made the borewell a hero? This was a question posed by a social worker years ago on a meeting on water conservation. I couldn't understand for a while the point he was making. But on deeper thought, he has raised a very pertinent point. Just go back a decade in your memory lane. Farmers who dug many borewells were considered progressive. The hand counts of those who were irrigating by gravity flow water or by any other traditional means were looked down upon. Such farmers too, not sure of others' reaction, would not tell in a loud voice that they are depending on traditional systems. Now, a time has come for the media to make such sustainable systems the real hero.

Take the example of Yethadka, a hamlet in Kasaragod district of Kerala. This hamlet is known for its *kattas*, the temporary check dams built by local arecanut farmers. Though thousands of *kattas* being constructed in and around Kasaragod district have vanished now, Yethadka retains the traditional spirit relatively nicely. Behind the renewed interest is a local journalist Chandrasekhar Yethadka's effort. Since the last two decades, he has been highlighting the benefits of *kattas* and has been organising seminars on that. Today the mention of *kattas* and Yethadka has become synonymous with that. Many study teams visit this village because this is the one of the only remaining 'museums' of community *kattas*. In Yethadka, *katta* has turned into a hero.

The need of the hour is to showcase the sustainable water conservation systems so that they regain the age-old social status. Because of its own reasons, the administration seldom does this. As such, the onus of showing the sustainable options lies with the fourth estate. If we go on searching, we can find amazing rural customs that ensured water safety even during drought. Damasha, still being practiced in at least half-a-dozen villages of Kolar district of Karnataka, is one such. In years of less rainfall, if the only village tank is not full, by mutual consent, the people of the village grow crops only in a proportionate area of their land. In such times, families who have their lands far from the tank won't get the water flow. As such, they are given the uncultivated lands near the tank without any fee. Community and class don't come in the way of this custom. In a Maharashtra village, each year, the villagers jointly decide on the crop that can be grown beneficially with that year's respective rainfall.



DROUGHT-PROOFING TECHNIQUES

Karnataka has some wonderful drought proofing practices that the country can be proud of. Sand mulching, which is widely practised in the black cotton soils of Koppal and surrounding districts, is one. Even with least rainfall these farmers manage to get a satisfactory yield.

In Hungund taluk of Karnataka, three generations of Nagarals have popularised a technique to grow 'arabaradagoo entaane bele' (meaning, 50 per cent crop even in half drought or full drought conditions). During the unprecedented drought of 2001 to 2003, the fact that many villages of Hungund were insulated by the effects of the drought is testimony to the efficiency of this technique.

Probably one important lesson a water journalist should keep in mind is that in drought-prone areas, if generations have been living there, they invariably should have innovated ways to combat drought and live with that. We need tactics, patience and time to identify, document and highlight such methods. Unfortunately, many such hands-on ideas remain in darkness or are being lost forever.

The movement of water is one that requires us to work for it all round the year. There is no discrimination in water activism. Each one, starting from the prime minister of the country, down to the faceless *chaprasi* has a role in it. This is for the simple reason that nobody could make a living sans water so far. Since there is a dearth of the right kind of information to lead the communities towards water sustainability, the role of water journalists has become all the more important.



SECTION FIVE
Reporting on Disasters



Dispatches from the Frontline: Making of The Greenbelt Reports

Nalaka Gunawardene and Manori Wijesekera

TVE Asia Pacific's regional TV series *The Greenbelt Reports*, released in December 2006, investigated how coastal greenbelts—coral reefs, mangroves and sand dunes—provide jobs, income and protection from natural disasters. Filmed on location in India, Indonesia, Sri Lanka and Thailand, the series captured the views of scientists, environmentalists and local communities. It used a dozen case studies to demonstrate that the only way to save Asia's remaining coastal greenbelts is to balance ecosystem conservation with people's economic needs. In this chapter, its executive producer and director trace the origins, process and outcome of their journalistic exercise.

ASIAN TSUNAMI'S ENVIRONMENTAL LESSONS

'Reminds us who's in charge!'

That short sms message, sent by an Indian environmentalist friend on the day after the Asian tsunami, summed it up very well. If nature had indeed meant to send us a signal, it was delivered with a deafening roar and a mighty punch on 26 December 2004.

It took a few days for the world to realise the true impact and devastation on coastal locations in many parts of South and Southeast Asia. As news reports and analysis poured in, it became clear that this was one of the biggest disasters in memory.

Living in Sri Lanka—where close to 40,000 people were dead or missing, and over 80,000 homes were destroyed—we were deeply affected by the massive humanitarian tragedy unfolding all around us. As environmentally sensitive journalists, we were also curious how the

killer waves had impacted coastal ecosystems. That's when we heard some interesting news reports—on how some elements of nature had buffered certain locations from nature's own fury.

Within days, such news emerged from almost all tsunami-affected countries. They talked about how coral reefs, mangroves and sand dunes had helped protect some communities or resorts by acting as 'natural barriers' against the tsunami waves. These had not only saved many lives but, in some cases, also reduced property damage.

Scientists already knew about this phenomenon, called the 'greenbelt effect'. Mangroves, coral reefs and sand dunes may not fully block out tsunamis or cyclones, but they can often reduce their impact.

The eminent Indian biologist Professor M.S. Swaminathan was one of the first scientists to mention this after the tsunami. 'Our anticipatory research work to preserve mangrove ecosystems as the first line of defence against devastating tidal waves on the eastern coastline has proved very relevant today,' he was quoted in *The Hindu* newspaper. 'The dense mangrove forests stood like a wall to save coastal communities living behind them.'¹

The Mangrove Action Project (MAP), an international network committed to conserving the world's mangrove forests, made an even stronger statement:

The severity of this disaster could have been greatly lessened and much loss in human life and suffering could have been averted had healthy mangrove forests, coral reefs, sea grass beds and peat lands been conserved in a healthy state along these same now devastated coastlines.²

The tsunami was not the first time the greenbelt effect was seen in action. It was reported when a cyclone hit the eastern Indian state of Orissa in October 1999. And after a major cyclone battered and flooded large areas of Vietnam in 1997, the Red Cross started community-based replanting of mangroves as a future 'defence'.

But the lessons of Orissa and Vietnam were soon forgotten, and mangrove forest in tropical coast countries like Bangladesh, India, Philippines and Sri Lanka continued to be cleared for tourism development or shrimp farming. Meanwhile, Asia's coral reefs came under pressure from destructive fishing practices, bleaching (due to El Nino) and coral mining.

THE GREENBELT REPORTS CONCEIVED

Might the tsunami's environmental lessons be forgotten just as easily? It was this question—and concern—that inspired us to create the Asian TV series called *The Greenbelt Reports*. The tsunami was only a take-off point; we probed many coastal resource management issues that were exacerbated by the disaster.

But how do we tell this complex, nuanced story? As visual journalists, we needed tangible evidence and, most importantly, authentic pictures to go with it.

We knew the socio-economic realities in developing Asia: it's not possible to fence off and guard the remaining coastal greenbelts. Tens of millions of people, many of them very poor, depend on these ecosystems for their jobs, incomes and survival. The challenge is to conserve coastal greenbelts while meeting the economic needs of local people. Is this feasible? What strategies and approaches have already worked? Where are the bottlenecks?

We set out to investigate. We talked to a large number of local, national, regional or global conservation organisations and research institutes. These included IUCN—the World Conservation Union, MAP, M. S. Swaminathan Research Foundation, Wetlands International and the United Nations Environment Programme (UNEP).

Some had produced assessments and analyses in the weeks and months following the tsunami. A few attempted economic valuation of the range of 'ecosystem services' provided by coastal greenbelts. For example, a report by UNEP-WCMC, International Coral Reef Action Network (ICRAN) and IUCN quantified benefits from coral reefs and mangroves in terms of fisheries, timber, fuelwood, tourism and shore protection. Some of their figures showed that the returns from viable greenbelts far outweighed the modest investments needed for their protection.³

We also turned to conservation networks like IUCN and MAP to find out how their member organisations were engaged in finding practical solutions at the frontline between land and water. Where our contacts across Asia didn't stretch far enough, we turned to a well connected friend named Google.

By the first anniversary of the Asian tsunami, we had researched a whole pile of stories and a shortlist began to emerge. We decided to confine our coverage to the four Asian countries that were hardest hit by the tsunami: India, Indonesia, Sri Lanka and Thailand. We then investigated which stories physically existed on the ground (some turned out to be

only online!), were accessible (those in conflict zones were not) and were visually interesting. We started contacting the relevant people to discuss when we might visit and film them. We also wrote up our findings in print and online media as we went along.⁴

Ideally, this kind of journalistic researching should have taken us to the locations, but we didn't yet have travel funds. So instead of commuting, we communicated!⁵

Parallel to this, we were trying hard to secure external funding to produce the series. As a non-profit media foundation, we needed such support to engage in our editorially independent work. By this time, our experience in another project, *Children of Tsunami: Rebuilding the Future*, made us realise that the massive outpouring of tsunami aid was too narrowly focused on rebuilding houses, roads and livelihoods—not enough was being invested on sociological or ecological aspects.⁶

It was in early 2006 that we finally secured some funds—from several sources (see acknowledgements note)—to go into production.

RETURN TO THE 'SCENES OF CRIME'

We filmed *The Greenbelt Reports* over several months in 2006. By this time, we had agreed on the output as:

- A series of short films (each exactly 5 minutes long), providing a quick overview of a case study or example, edited in news and current affairs style; and
- A half-hour film in documentary style, that drew on the same material but packaged differently with more reflective narration and interviews.

For filming these stories, we mobilised four all-Asian production teams. We commissioned freelance filmmaker Moji Riba to produce the three India stories—he was both director and cameraman. The stories in Indonesia (two) and Thailand (three) were directed by Manori Wijesekera, while the Sri Lanka stories (four) were directed by Pamudi Withanaarachchi. In each case, they worked with a locally engaged camera crew, our standard practice to ensure we get as close to the ground reality as possible. Between them, they covered a dozen locations in the four countries—all coastal sites battered by the tsunami.

As a rule, we don't go out to film a story with a ready-made script in hand. Instead, we research the story in advance, generating a short outline that summarises the key issues, locations and players involved.

While this guides our teams when on location, it leaves enough room for us to follow our instincts and ‘news sense’.

While on location:

- We looked at three types of ecosystems—mangroves, sand dunes and coral reefs—and probed how they protect and sustain lives and jobs.
- We asked how the local people, in turn, can play a part in saving, restoring or managing these ecosystems.
- We interviewed a cross-section of officials, scientists, activists and local community groups in all these places.

The location filming was intensive and challenging. And all being outdoor, coastal stories, we were completely dependent on fair weather. The bright, tropical sunshine also posed difficulties: unless the skies are cloudy, outdoor filming from around 11 am to 4 pm is not possible (film is over-exposed). Filming near waterfront further shortens this window, as sunlight reflects off water or sand. We had to plan well and work hard to get the footage we need, within an average of 4–5 days of location filming in each place.

All our stories looked at how local communities, organisations or scientists were working to conserve and/or sustainably use coastal greenbelts. Our stories were interview-driven, and it was not always easy to film good interviews. For example, highly knowledgeable and expressive community members suddenly became camera conscious, turning stiff and formal in their answers. Scientists found it hard to explain complex issues in simple, non-technical language.

We had to be tactful and patient to get the best possible interviews. With scientists, we kept asking what might have seemed like ‘stupid questions’, or re-filmed some answers. With community members, we found filming angles that ensured the camera was not prominently in front, and within minutes, they became relaxed and informal.

We respected the social norms where we filmed. Sometimes this meant spending more time on location than expected. For example, in Tuntaset village in Thailand’s Phang Nga province, our plan was to film the mangrove replanting programme of the local school and then move on to the village about half an hour’s drive from the site. But when we reached there, we found a very formal process of garlands and speeches—which took three hours, ending with lunch. Our Thai cameraman was smart enough to sit at the edge of the group, and after a few minutes, he slipped out and filmed the meeting and the nearby mangrove forest.

Sometimes we had to film in tough conditions. In Jaring Halus in Sumatra, for example, the community lives in wooden houses built on stilts over the lagoon. Filming their mangroves meant standing in mud, knee or waist deep, while swarms of hungry mosquitoes hovered around us. Staying still in such conditions was no easy task!

Luckily, all our camera crews had the right temperament. They were not obsessed with just shooting a story and rushing off to the next location. They shared our interest in what experts, activists and local people were doing—and how these actions were making a difference to the people and their environment. Keeping our eyes, ears and minds open also led to unexpected discoveries (see Box 21.1).

Based on what our research and location filming found, we can cautiously offer some good news: *there is hope yet for saving Asia's remaining coastal greenbelts*. It is a huge challenge, but the knowledge, skill and energy for rising to that challenge are all available.

Across Asia, dedicated individuals and groups are trying out various methods to save, strengthen or bring back coastal greenbelts degraded by years of neglect and exploitation. They are working against many odds, and most of their efforts are not widely known or externally supported (see box 21.2).

But their experience shows that it is indeed possible to have the greenbelts and use them too. This is the core message we have tried to convey in our TV series.

Box 21.1: Serendipity on location

We had just finished filming a story with Claudio Conti, an Italian mangrove expert who was studying and regenerating mangroves on the Phra Thong island in southern Thailand. We decided to drop in on the Moken community—the nomadic sea gypsies—with whom we had filmed earlier as part of our *Children of Tsunami* project. We wanted to meet one of our child 'stars', Bao, and his grandparents.

Arriving in their village, on the other side of the island, we found that many villagers had moved out to the mainland to settle down in new houses built with tsunami aid money. Only a handful of Moken families stayed behind, anxious to preserve their culture. Chaffing with them, we discovered that one main reason was to protect their local mangrove forests, which were recovering from the tsunami.

(Box 21.1 Contd.)

(Box 21.1 Contd.)

Suddenly, we were on to a whole new story that wasn't planned or budgeted for. We spent several hours chatting with Khiab Pansuwan and Jureerat Pechsai (Deun), two Moken women leading the mangrove restoration without any funding or experts from outside. Deun had worked as a volunteer with conservation organisations and learnt about ecosystems and how to protect mangroves and endangered species. 'We don't want anyone to cut down trees because the mangrove forest saved many Moken lives (during the tsunami),' Khiab said.

The Moken are struggling to prevent mainlanders coming on to their island to grab the remaining mangroves for short-term benefit. Reflecting on this, Deun said: 'It takes many years for the trees to grow, but it takes only one day to destroy it.'

Their story became *The Greenbelt Reports: Love Thy Mangrove*.

—Manori Wijesekera

Box 21.2: Greenbelts as 'lifebelts'

In filming *The Greenbelt Reports*, we witnessed how different Asian communities related to their coastal greenbelts. I often wished these communities—separated by distance and culture—could see how others like them co-existed with their local ecosystems, deriving benefits or solving problems innovatively.

When filming in the Jaring Halus village in the Indonesian island of Sumatra, we saw how a small fishing community—in an isolated location some three hours from the nearest city—was fighting to save and improve the mangroves vital for their livelihoods. They had already succeeded in getting the whole community involved in protecting their local mangrove forest. On this strength, they negotiated with the authorities for the right to co-manage 500 hectares of mangroves in a nearby wildlife sanctuary.

(Box 21.2 Contd.)

(Box 21.2 Contd.)

Some youth leaders engaged in this effort were university graduates who had returned to do their bit for the community, probably foregoing opportunities in the city. It was touching to see their pride in the traditional way of life, and how they coped with very basic infrastructure and daily uncertainties of fisher life.

Until I arrived in the village of Paanama in eastern Sri Lanka, I had not quite realised how much greenbelts could buffer a coastal community from the sea's ravages. Some 18 months after the Asian tsunami, I could still see the impacted mangroves, which bore the brunt of the tsunami waves and, together with large sand dunes, protected the whole village. The small, basin-shaped locality—sandwiched between the Indian Ocean and a lagoon—was one of the most visually striking examples of the 'greenbelt effect' at work. No wonder the people of Paanama were busy regenerating their mangroves.

Communities in Indonesia and Sri Lanka use their greenbelts in different ways. But they all shared an acute awareness that the greenbelts are inextricably linked to their physical—and often economic—survival. There can be no better imperative for conservation.

—Pamudi Withanaarachchi

'WEAVING' THE STORIES

We edited and post-produced the entire series in Colombo. The three directors, Moji Riba, Manori Wijesekera and Pamudi Withanaarachchi, took turns in logging all their camera tapes, and based on what they had filmed and noted during location filming, they worked on draft scripts. Nalaka Gunawardene then took over as series writer.

Of the dozen stories we filmed, seven were exclusively on mangroves, while two covered locations with both mangroves and sand dunes. The balance comprised a story each on a sand dune, a coral reef and a man-made greenbelt of non-mangrove trees. In packaging these into 5 minute films, we looked for distinctive features, or a particularly interesting angle from which to present each story.⁷

Where we found strong personalities, we made them the main 'character' to take us through the story, for example, the Italian scientist

and Thai sea gypsy women, separately working on mangrove regeneration on two sides of the same Thai island. In some cases, we opted to 'lead' with an articulate local woman over an award-winning conservationist, or a passionate and expressive school teacher instead of the school's principal.

In making moving image productions that we hope would move people's minds, our preferred style is to have limited narration. We don't make films to communicate information; we see ourselves as journalists telling factual, compelling stories about the complex real world. In this endeavour, we want our pictures, sounds and interviews to tell as much of these stories as possible, with narration providing bare minimum context and coherence.

We first developed each story visually, stringing together the best visuals and interview clips. Such a 'rough cut' was typically two or three minutes longer than our desired 5 minutes. We then edited them, writing minimal narration and tightening up as we went along. Telling a self-contained story in just 300 seconds is entirely possible, but it's hard work: every sequence, sentence, interview and even pause or sound effect serves a purpose.

Our approach to the longer documentary was different. First, our production team identified the essence of all our location filming, interviews and background information that we had amassed. Then, through a process of distillation, we derived the most important findings we wanted to convey within half an hour. We had already filmed a couple of 'big picture' level interviews to be used in this documentary.

Early on in the film, titled *The Greenbelt Reports: Armed by Nature*,⁸ we set the scene as follows:

In this film, we return to many Asian coasts that were battered by the tsunami.

We try to understand how the greenbelt effect works—and more importantly, how Asia's remaining greenbelts can be saved. We meet activists, researchers and local communities—all looking for practical ways to achieve this amidst poverty and under-development.

We ask some hard questions: Two years after the Asian Tsunami, have we learnt its powerful ecological lessons? And are we better managing the coastal ecosystems and resources now than before?"

In the whole edit process, we sought to balance conservation interests with community needs; technical analysis with grassroots insights; and development communication with plain, good environmental journalism. Our viewers would be the best judges on how successful our efforts are.



CREATING RIPPLES, OPENING MINDS

The *Greenbelt Reports* took almost 18 months to make, from conception to release. The key lessons we learnt from this process are summarised in box 21.3.

Challenging and sometimes tedious as it was, all this work represented only *half the job done*: we believe that making good films serves little purpose until and unless they are widely distributed, seen and used by as many people as possible.

Once our production teams complete a new video film or series, it is taken over by our Distribution Division, which promotes and distributes it across political borders, cultures and media platforms for as long as the content remains valid and relevant. In this case, the series has been produced with a 'shelf life' of at least two to three years. *And it's distributed without any license fees, allowing free and fair use for broadcast, civil society and educational purposes.*

We launched the series in early December 2006, just in time for TV broadcasters to schedule it during the last week of the month coinciding with the second anniversary of the Asian tsunami.⁹ Although the tsunami was only our launch pad, we knew the lasting value of having it as a news peg. The series was quickly picked up by TV channels and networks from across Asia.

In our print and online promotion for the series, we raised three key questions:

Two years after the devastating Tsunami, are Asian countries managing their coastal resources more rationally and scientifically?

As the memories of the mega-disaster fade, is there a danger that its important environmental lessons might soon be forgotten?

Why do local communities battle bureaucracies and vested interests to save, restore or manage Asia's coral reefs, mangroves and sand dunes?

The series has since been used extensively by conservation organisations, scientific meetings, environmental activists, school teachers and training institutions all over the Asia Pacific. We have heard from scientists and grassroots activists featured in the series how they are using these films as advocacy, awareness or educational material. Encouragingly, the series has also generated interest from those in other regions of the world.

After their release, some films, like books, achieve a life and momentum of their own. This has certainly been the case with *The Greenbelt Reports*, whose journalistic content has resonated with so many educators, communicators



Box 21.3: Making *The Greenbelt Reports*: Our learning

Here, in summary, are the main lessons we learned from producing and distributing *The Greenbelt Reports*, first series:

- Often, the inspiration or catalyst for a new environmental film or series can come from a print or online news report originating in some far corner of the planet.
- Environmental journalism on video involves the same rigorous approach as in print or online, but we have to also think visually—and let pictures tell most of the story.
- It is far more compelling to tell a story using eye witness accounts or through the words of people who live in our story's daily reality.
- Experts and activists are useful sources of information and some also provide good interviews—but we should not rely exclusively on them.
- Public interest environmental film-making is meant for the non-technical public, which requires our stories to be based on science, *but not immersed in it*.
- Similarly, while looking at ecological dimensions of a story, we also need to probe the socio-economic, political and cultural aspects.
- A film is most effective when it tells an engaging story. Communicating information or messages is a secondary objective, and should not get in the way of story telling.
- Any complex story can be broken down into key ideas and told in simple, everyday language. Those who use jargon or abstract concepts are too lazy to attempt this.
- It is fine to ask more questions than we end up answering in a film. Our viewers will, hopefully, go in search of answers that we don't readily provide.
- Making a good film is only half a job done. Promoting and distributing it far and wide is just as important. Never underestimate the time and effort needed for that!
- If we make a public interest film using public/donor funds, it is imperative that we don't impose a crushing copyrights regime on it. Let our film roam free. Be flattered by unauthorised copying.

and activists. These individuals—and sometimes their organisations—are now running with our product, taking it to more people than we could have done on our own.

For example:

- TV stations and NGOs have versioned (at their cost) all or some stories into key Asian languages—including Chinese, Japanese, Khmer, Korean, Nepali, Sinhala, Tamil, Thai and Vietnamese.
- The films have been used to stimulate discussion and debate at scientific, activist and conservation meetings on topics such as biodiversity, coastal resource management, community land rights or sustainable fisheries.
- The 5-minute stories have been linked to, or embedded in, various online video platforms, blogs and web-based educational media services.

At the time of writing this chapter, in April 2008, the original series continues to be in demand. Inspired by the overwhelmingly positive response it received, we have started working on a second series. This will take us to more countries, but our scope will remain the same: how greenbelts are closely linked to the survival of half a billion people who live on the edge along Asia's coastlines.

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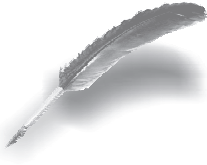
The Greenbelt Reports series (12 × 5 mins = 60 mins of viewing) is available as a compilation on DVD, while the half hour documentary, *The Greenbelt Reports: Armed by Nature*, is separately available on another DVD. For obtaining DVDs or broadcast masters, please contact TVE Asia Pacific's Distribution Division on email: <films@tveap.org>

DVDs are also available on TVEAP's e-shop at: <http://www.tveap.org/shopping/search.php>

The five minute films are also viewable online at: <http://www.youtube.com/TVEAPfilms>

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Floods: Blacked Out but Real

Sunita Narain

(15 October 2007)

I read newspapers and I watch the news unfold on scores of television channels. But in spite of these sources that keep me informed about current affairs, I would not know that floods are still ravaging vast parts of India. I would not know that over 2,800 people have died in these disasters, which have been termed as the worst ever in living memory. I would not know what is happening in the villages that drowned under the fury of nature or how millions are coping with the water that has swept away crops, livestock, worldly belongings, homes, roads, schools and what not. I would not even know how life continues after the fury, when deadly diseases come in the wake of the flooding.

In retrospect, I would think that I have seen in the Indian media more images of the recent floods in the UK than in Jammu and Kashmir, in Uttar Pradesh, in Bihar, in Assam, in Orissa, in Andhra Pradesh, in Karnataka and in Gujarat.

There are two responses to this observation.

One (cynical) answer is that middle-class India, for whom the media now delivers news (or infotainment), is simply not interested in events that affect poor India. In addition, the advertising revenue of the competitive and consolidated business of the media kicks in when it caters to the purchasing segments of society, not its market-unconnected parts. Floods in non-metropolitan cities don't make the grade, as far as news is concerned.

The other, equally plausible reason could be that floods in India are after all not news. While floods in the UK are unusual; they are increasingly understood to be part of the changing climate system and so they make it to the headlines. But floods in India are annual events. The cycle of devastation is not worth reporting—droughts followed by floods

in one region or another, and then water-related diseases, from malaria to cholera. There is no news to tell.

But whatever explanation you choose to believe, we cannot switch off reality. The story of floods is partly usual but also mainly unusual. There is much we know but still do not heed so that devastation is less painful. But equally, there is much that we do not know because of which the pain is much more frightful.

We know that the areas classified as flood-prone—defined as area affected by overflowing rivers (not areas submerged because of heavy rains)—has progressively increased over the past decades. It was 25 million hectares (mha) in 1960, which went up to 40 mha in 1978 and by the mid-1980s an estimated 58 mha was flood affected. But importantly, over these years the area under floods increased each year even though average rainfall levels did not increase. In other words, we were doing something wrong in the way we manage the spate of water so that rivers would overflow each season.

The answer is not difficult to find. In flood-prone areas—from the flood plains of the mighty Himalayan rivers to many other smaller watersheds—the overflow of the river brought fertile silt and recharged groundwater so the next crop was bountiful.

But over the years, we learnt not to live with floods. We built over the wetlands, we filled up the streams that dispersed and then carried the water of the rivers and we built habitations in lowlands which were bound to be inundated. We cut down our forests, which would to some extent have mitigated the intensity of the flood by impeding the flow of water. All in all, we have become more vulnerable to annual floods.

The current floods are all that, and much more. In recent years, the flood fury has intensified because of the changing intensity of rainfall. The deluge comes more frequently because of the sheer fury of incessant rain, which has nowhere to go. Just last week torrential rain in the villages of Andhra Pradesh and Karnataka killed over 60 people. We know that climate change models had predicted extreme rain events. Is there a connection here?

Then there is the issue of the release of water from reservoirs into lands, which are already deluged by rain. It is this combo effect that seems to be playing a big role in the floods we see today. There is some evidence that reservoirs—dams upstream of drowned lands—were already full of water at the beginning of the monsoon period. There is no hard evidence, as yet, to link this high reservoir level with increased flow from melting glaciers. But there is a possibility.

We know that dam authorities maintain high reservoir levels because of the uncertainty of rains. We also know that when there are intense bursts of rain and levels of water rise to an extent that could endanger the dam, the gates are opened and the water rushes out. If this flow of water is combined with even more rain in the region, then a deluge becomes inevitable. We know that variability in our rainfall is increasing at the sub-regional level. What then will this mean for the management of our reservoirs in the future? The question is do we understand the phenomenon of floods?

We don't. We have no mechanism to be informed of the changing intensity of rainfall; of the increased inflow into our reservoirs and of the water released by dam authorities. The fact is that today's floods are a double tragedy: of mismanagement of our land and water combined with mismanagement of science and data.

This mismanagement is criminal. Let's at least know that.



Turbulence: How Volunteers Cyber-Responded to a Tsunami

Peter Griffin

On 26 December 2004, Southeast Asia was hit by a double tragedy: a huge earthquake off the Indonesian coast, followed by a tsunami that wreaked havoc on the coastlines of countries around the Indian Ocean. The death and destruction that those waters brought defied description. The world was shocked. And then came the second wave: a huge outpouring of concern, sympathy, desire to help, and a need for information. With a disparate bunch of people from all over the world, most of whom I never knew before that day, most of whom I will probably never meet but who I now count as friends, I was part of an online initiative that started out as TsunamiHelp, and became the South-East Asia Earthquake and Tsunami Blog, known also as the SEA-EAT blog.¹

It took up large chunks of my waking hours until the end of January, and in many ways, big and small, changed my life. This isn't a definitive account. It is a very personal view—half a narration of the events as I remember them, half an attempt to understand it better myself.

I had been blogging since late 2003, and in mid-2004, I began to develop a fascination with collaborative blogs. Caferati, a collablog² I set up for an online writers forum I co-moderate, had done reasonably well for itself. I was also one of Rohit Gupta's early invitees to the (now defunct) media watch blog, DesiMediaBitch (DMB). In mid-December, I had been helping Rohit and the other members invite guest bloggers from among India's neighbours to take part in this great idea that he came up with, to take DMB beyond the *desi* (local/indigenous): a week, starting 26 December, of exclusive bitching from across our borders, after which our guest bloggers would become permanent members.



DMB morphed into Dogs Without Borders, which became Chien(ne) s Sans Frontières or just CSF, a tongue-in-cheek homage to Médecins Sans Frontières. And then the tsunami hit. As the news began coming in, I shuttled between TV in the living room and the computer on my desk; the extent of the disaster started to dawn on me. Part of me desperately wanted to do something, anything, to help. I considered heading south, but for a variety of reasons, partly financial, but mostly selfish and personal, that wasn't an option. At some point I realised that vast quantities of help would be needed, and that there really wasn't anything like a single repository for aid information that I knew of. Perhaps the best thing I could do would be to collate that information and put it all together in one place. It didn't occur to me to try this on my own. I didn't have the kind of reach or readership to have any useful impact, for one. And it was just too big a task for one person, anyway.

FIRST STEPS

Rohit Gupta (who, by the way, I had not met in person at that time) and I exchanged a flurry of SMSs and phone calls. He promptly agreed to join in. I quickly set up a blog on blogger.com, a popular free web publishing service. I chose Blogger without really thinking about it too much. It was the only blog provider I knew of that permitted multiple contributors; and it was, thanks to Caferati and DMB, an interface I was comfortable with.

Besides, it was pretty simple to use, and since it was popular, chances were that most of the people we contacted would know how to use it. I put up a placeholder post stating our broad intentions—later deleted—and we began hunting up information, while simultaneously carpet-bombing our address books to invite bloggers we knew to join in. Dina Mehta, an influential blogger (and another person I only knew online), was one of the first to jump into the effort. Dina and Rohit both wrote for World Changing (WC),³ a highly-regarded group blog. They both wrote about TsunamiHelp, as we called it then, on WC. One of WC's leading members in turn tipped off Boing Boing,⁴ who linked to us. Around the same time, I had mailed Prem Panicker, Managing Editor at Rediff in the US (yet another online-only friend). Almost immediately, all Rediff's coverage⁵ began to feature a link to our blog. Out of habit, I had plugged a Sitemeter⁶ counter in to the blog.

MULTIPLYING VIEWERSHIP

Suddenly, I noticed that the viewership had started multiplying: from the few hundred initial visitors that probably resulted from our mass mailings, to thousands every hour. Somewhere around then, we realised we were in the middle of something far bigger than we had imagined. The next day, the *New York Times* and the *Guardian* in the UK had written about us, and put our URL in their articles. Shortly after, the BBC linked to us as well, listing us as a reliable resource. These and many other news organisations across the world cited us as an authoritative source for information.⁷ The search giant Google put a tsunami aid link on their home page (unprecedented for them), and linked to us from their dedicated Tsunami page.⁸

Later, through the efforts of one of our members who had friends working in Google (the owner of Blogger) we were guaranteed unlimited bandwidth, ensuring that the site wouldn't go down. And of course, bloggers and webmasters linked to us by the thousands too.

Traffic, as a result, was overwhelming: over a million visitors in the first eight days. Sitemeter, the provider of the free tracker I had installed, had to shut down our counter several times because the load was hampering their service to their paid clients. Our mailboxes were bombarded with offers to help—not just from people wanting to blog with us, but people asking how they could help directly.

There was much discussion in the group about what exactly we were trying to do, at times (as can happen even in the best-intentioned groups) at the cost of constructive action. To some of us it was clear that news organisations had the resources to provide much better hard news coverage than we could hope to. Wikinews, in its first real test as a news source, was doing a sterling job of newsgathering via collaboration⁹ too.

What was missing was a single place to find information about the NGOs and aid organisations working on the ground. The press was already referring to us as the leading clearinghouse for information on the victims of the disaster. All this helped us hastily, but formally, define our task: collate news and information about resources, aid, donations and volunteer efforts. We set some ground rules: no politics, no opinions, steer away from controversy, just find out about and link to aid efforts.

Around then, because some of us felt that TsunamiHelp as a name didn't encompass the earthquake which was the cause of the tsunami, we also formally changed the name of the blog to the South-East Asia Earthquake and Tsunami blog.



ADAPT, IMPROVISE, INNOVATE

The group self-organised very smoothly, with very little centralised control. E-mail addresses and phone numbers were exchanged via group mails and instant messengers. The Google Groups¹⁰ mailing list I had attempted to start as a coordination mechanism was in limbo—I had invited too many people in a short period, so it went into automatic review for spam. Someone else started a Yahoo!Groups list,¹¹ which became the mainchannel for communication.

Thanks to the furious pace at which this very enthusiastic group was working, the blog had already become huge. Searching within all those posts was tedious for us, its creators; it would be much more difficult for a first-time visitor anxiously looking for something specific. Part of this was due to the limitations of the template we were using. We realised that while Blogger made collaboration by multiple contributors easy, it had serious limitations as well: no native way to classify or tag individual posts till date; and, at that time, no comment moderation or ways to avoid comment spam.¹²

SPLITTING THE BLOGS, AND A WIKI

We worked around this by splitting the blog into sub-blogs with different focus areas. Teams took charge of each one, and began copying content from the main blog into Tsunami Enquiries/Helplines/Emergency Services, Tsunami Missing Persons, Tsunami News Updates, Tsunami Help Needed and Tsunami Help Offered. Meanwhile, a design pro in the team took charge, corrected my initial ham-handed efforts to tweak the design, and created a template that wasn't just much easier on the eye, but also organised the information far more efficiently.¹³

Someone suggested that a wiki would be an even better idea, and perhaps what we should have done in the first place. But since so many organisations and individuals were already directing traffic to the blog URL, moving home would mean unnecessary extra clicks for visitors. Besides, not everyone in this blogger-heavy group was wiki-savvy. So, instead of replacing the blog with a wiki, we decided to make it a parallel effort. Initially, we created a wiki as part of Wikinews, but ran into disagreements with the administrators there.¹⁴

To cut out the squabbles, Dina paid to register a domain name, tsunamihelp.info, Rudi Cilibrasi donated server space, and a team of wiki-adepts began work, copying, categorising and pasting content from

the blog. Another team worked on creating a database of volunteers and volunteer efforts, based on all the requests and offers of help, a project which evolved into AsiaQuake.

Rather than everyone trying to do everything at the same time, the teams evolved sets of duties. Janitors checked posts and cleaned up typos, made sure links worked, that the correct info was going into the correct places, that things that were not vetted or controversial weren't going online. Monitors checked the various dedicated e-mail addresses we had set up and information that readers were leaving in the comments to our posts. Linkers made sure the data in the sidebar stayed current, after some erroneous and outdated coverage was discovered. Aside from e-mail, we also used Yahoo! Messenger for instant communication, both one-on-one and using its conference facility¹⁵ to hold meetings.

When inaccurate information about the effort began appearing in the media, a few of us who had experience in the field worked out a system for answering questions from the press. Those of us with the necessary contacts networked with NGOs to get information from the ground. Blogger's native search wasn't delivering well enough, so Pim Techamuanvith paid for a professional search tool that we plugged in. Someone came up with the idea of using Flickr¹⁶ and its tags to help the Missing Persons effort, and quickly set up a Flickr pool. A working-group page with presence indicators that keep track of things like who was doing what, and what needed to be done, was set up on space given to us by SocialText.¹⁷

A translations group took charge of creating versions in other languages. Work on a database began alongside.

PULLING TOGETHER (AND SOMETIMES, APART)

To this day, I haven't been able to figure out precisely how many people chipped in to help. Sure, you could tot up the numbers: the contributors listed on the blogs side panel; the IDs and IP numbers on the wiki; the subscribers to the newsgroup.

You'd wind up with a number over 200 ... but that's just part of the story. They came from everywhere, Asia, Europe, North America, South America, Australia (I don't recall too much African traffic, strangely enough) connected only by the web. They included veteran bloggers, geeks, poets, lawyers, executives, academics, teenage students, foodies, lit-lovers, database wonks, wiki fans, cooks, stay-at-home moms, designers, artists. They mailed in information, they blogged, they linked,

they commented, they wikied, they copied, pasted and sorted data, they put their lives on hold and put out their hands to do what they could. Miraculously, each time we needed something done, someone stepped up with the knowledge and expertise, and just did it. Solutions were improvised—like the sub-blogs and the Flickr page—and somehow, it all worked.

Over multiple chat windows, we kept each other motivated, encouraging—nay, ordering—one another to get some sleep, some food, some relaxation, while ignoring similar exhortations directed at ourselves. But it wasn't all good vibrations. With the frenetic levels of activity and stress, there was bound to be some friction. There were frayed tempers, misunderstandings, and a couple of blow-ups. A potentially interesting offshoot, ARC (Alert Retrieval Cache),¹⁸ which posted SMS text messages to a web page, unfortunately sustained collateral damage in one of the two major interpersonal conflagrations that hit the group.

The other flare-up happened because the group was being harried by one person's needless barrage of e-mail. Instant decisions had to be taken, and were, with some unpleasantness that still hasn't quite gone away.

In a more amicable parting of ways, a few bloggers separated to run a blog that followed the same model but also included political comment and opinion.¹⁹

DRAWING THE LINE

Overall, it was difficult to know where to draw the line between gently reining in over-enthusiasm and curbing efforts by some members to promote their own agendas. I'll wager we erred on the wrong side of that line as often as not. And resentments, yes.

In the midst of a related initiative, long after January, Dina and I discovered that some people thought we were hogging media attention to further our own consultancies. For the record, Dina is a researcher and ethnographer, I'm essentially a writer for hire. Neither of us consult on blogs, and most of the people we consult for still haven't a clue what a blog is.

What's important, however, is that these resentments didn't surface at that point. Work continued uninterrupted, quality kept getting better. What kept us going was the knowledge that in some small way, we were helping. Many of us were spending all our waking hours online, and getting very little sleep when we did take a break. The baton was passed from hand to hand across countries, continents and time zones.

No single person was indispensable—willing hands took up the slack whenever someone had to leave. I remember blogging until my taxi arrived at the door, packing my laptop, bandaging a bleeding thumb en route (I had sliced it on a razor while I was cramming things into a haversack) and getting to my Delhi train just in time. By the time I next logged on 18 hours later, in the home of my friends Devangshu and Nilanjana, so many developments had taken place that I never really caught up or caught on.

One just assumed that things had been taken care of. In the inbox of the e-mail address I used for the group, some 300 unread messages from the mailing list still stare accusingly at me. And that is after clearing out roughly 400 in several instalments.

Food? Ignored. Sleep was a dispensable luxury. People turned party invitations down without a qualm (it didn't seem right for me, I know, to celebrate the New Year; I'm sure others felt the same). People apologised profusely for the time it took to move from a work PC to a home PC. Work itself was neglected: for those of us who worked on our own, as freelancers and entrepreneurs, it meant non-working (that is, unpaid) time.

For the ones holding down jobs, it meant juggling everyday tasks with the SEA-EAT effort. I remember InstantMessaging our designer about the blog not showing up properly on one browser. 'Give me a minute,' she said, 'I just have to tell someone to go away.' An hour of painstaking tweaking (on her part) and wailing (on mine) later, we had sorted it out. 'Who was that you shooed away?' I asked her. 'My boss,' she typed back, adding a smiley.

Another member excused himself briefly as midnight came around on 31 December. He was back in a very short while. He had just popped up to raise a toast to the New Year with the folks in his apartment, and was back at his computer in minutes. One member quietly and calmly took over the tech coordination when others burned out. Another spent huge amounts of time online though she had to make crucial preparations for an upcoming wedding—her own!

Another didn't sleep for several days, fuelled only by rice, coffee and adrenaline. I can't speak for the offline support other people got. I know I got plenty. DD and Nilanjana kept thrusting plates of food and mugs of coffee into my hand, letting me hog their broadband connection while they shared the other PC and the dial-up. Quiet, calming encouragement from them and from Annie. Their toleration of my whining and angst when things were getting tense. Nilanjana telling me about explaining the blog to her grandmother in Calcutta: the lady looked at the screen in



silence for a few minutes, then got on the phone to all her friends, telling them, 'We can't let these youngsters do everything!'

Those elderly ladies then organised collection drives, doing the grande dame thing with hapless club managers and the like to get donations. Nilanjana and DD again, calling up their friends in the Indian media—with a few honourable exceptions, most had no clue that this thing was going on in their backyard, so to speak—to clue them in, then helping me condense this new, rather exotic concept into media-friendly morsels.

Friends sent supportive SMSs, mailed in links. These things stayed with me.

THE CHIEN(NE)S SANS FRONTIÈRES EFFORT

Side by side, another enormous effort was taking place. Some of the bloggers of CSF, the blogs-across-borders week forgotten, were blogging, mailing and SMSing from the frontline. Dilip Dsouza was mailing in practical advice from Tamil Nadu: 'Don't send clothes, they are lying in piles on the roadsides.'

WHAT NO HUMAN SHOULD HAVE HAD TO WITNESS

Four young men in Sri Lanka, three in their teens, one barely out of them, were witnessing what no human being should have to—devastation, morgues, identifying corpses, burials in graves they helped dig. They spoke passionately of aid not getting to where it was needed, of corruption and inefficiency. One of them, Morquendi (an online handle, since I haven't been able to get his permission to use his real name) and I chatted online for hours one night, the matter-of-fact text of his IMs detailing the political games that were being played, the risks he and his young friends were taking, the things they were seeing. He was worried about them. 'They are so young,' he said.

How old are you, Morq, I typed. '23,' he wrote back. I brushed away tears several times that night, not for the first time in those weeks.

HINDSIGHT

Did we do any good? Did we meet our own expectations? Frankly, we didn't have a formal agenda when we started. We just did the best we could, as we saw it then. Some people donate money. Others send

clothing, food, medicines. Some go to the affected areas and volunteer. We had web expertise, we knew how to look for information, how to make it user-friendly, we had networks. That's what we could give, and we did. My friend Nilanjana Roy put it into words for me.

She said. 'It was your way of putting a candle in your window to show that you cared.' Did we change the world? Did we make a significant difference? In small ways, I do believe we did. Looking back, we know we were able to help.

From the e-mails, the traffic counter, from the links to us from global news organisations and blogs, we infer that we were able to provide valuable information at a time when it counted. Together, we created a little bit of Net history, created a model for online collaboration that did the job. A model that we, or others, can refine (and have done so) and make more effective.

GOING ON FROM THERE...

Some of the TsunamiHelp team continued to stay in touch, to build friendships on the strength of that month of working together. We debated the creation of a formal organisation, of documenting processes, but for most of us, we had neglected the rest of our lives for too long, and the process of catching up meant that these thoughts fizzled out.

I had begun to think that SEA-EAT was a one-off, but I was relieved to see that when there were a couple of subsequent earthquake scares in the region, many of the team, alerted by the newsgroup, immediately got back in touch and began updating the blog and wiki.

Then, on 26 July 2005, north Bombay was hit by 944 mm of rain in one day; what the weather people called a 'cloudburst'. Much of the suburbs stayed flooded for days. People were stranded in offices or on the roads. Residents of ground-floor flats found themselves with almost all their possessions unsalvageable. Many lived through days of waterlogging, no electricity, no phones, but plenty of anxiety. In the aftermath, a group of city bloggers, with a bunch of friends from other parts of the world, began to put together two blogs.

Mumbai Help focused on creating a resource that would be useful not just in the immediate situation but for future reference as well. Cloudburst Mumbai was more specific, concentrating on information about the flooding, news reports, aid efforts and the like. Both blogs got respectable readership, though nothing close to the SEA-EAT figures.



Out of these efforts, some of us, plus a few other like-minded folk, started up an initiative called ThinkMumbai, to look at some of the city's deep-rooted problems, and to provide some aids for future difficult times. That effort went into a long hiatus, but a few of us are in the process of reviving it this year.

In late August, Hurricane Katrina smashed its way through New Orleans. Several days before that, as it became clear that Katrina was very likely to hit the coast, some members of the SEA-EAT team had swung into action. There was a blog, but it was incidental. Based on the SEA-EAT experience, the team made the wiki the focus of their efforts. And that wiki logged a million visitors in two days. Of course that's largely due to the fact that Internet penetration in the US is of a completely different order of magnitude, and this disaster was happening in their own backyard. The team used the database methods earlier put to use to match volunteers and NGOs to assist in projects, such as a People Finder and a Shelter Finder. They also came up with fresh ideas, such as creating and using a local Skype²⁰ number as a call centre, manned by shifts of volunteers in three continents.

In October, an earthquake near the India–Pakistan border in Kashmir resulted in major losses of life and property. Again, many members of the SEA-EAT and CSF teams, plus others from the MumbaiHelp effort, got together to try and help out. With the remoteness of the area, and the consequent paucity of information, the team went back to a blog as the centre of the effort. An attempt to create a system where SMSs could be sent direct to a blog didn't work out.

In December 2005, Bala Pitchandi and Angelo Embuldeniya came up with the idea of a memorial week that would try and bring the world's attention back to the victims and survivors of the year's disasters, a campaign that got a lot of support across the web.

Around the same time, the group decided that starting a new blog or wiki each time something bad happened wasn't the best way to approach this. That meant establishing credibility and search engine rankings each time. We decided to bring it all under one umbrella, and we now call ourselves the World Wide Help (WWH) group. The methods we follow are to post alerts and warnings to the WWH blog (and by now, with our links to NGOs, world bodies and relief agencies, we're able to keep tabs on potential crises pretty efficiently); and if a situation looks like becoming a major disaster, we then look at creating a focused resource. We used the WWH blog during the floods in Suriname in May 2006,

with a combination of news reports, translation efforts, on-the-ground reporting, and information from relief organisations.

This July, around the time I was revising my draft of this chapter, seven bombs planted by terrorists went off in Mumbai local trains during the evening rush hour, killing 181 commuters and injuring another 890. The city was in chaos; suburban trains on the Western Railway line were obviously not running. But road traffic was jammed too, at a standstill.

Phone lines were jammed—as rumours and panic spread, everybody seemed to be trying to call everyone else at the same time. Networks couldn't take that load, naturally, so huge numbers of people got no information whatsoever, which only fuelled the confusion. Family and friends in other parts of the world frantically trying to make sure their loved ones were safe only added to it. Some of us turned to the web for answers, and MumbaiHelp came back to life, with a flurry of e-mails, first-person reports on road conditions, hospital numbers, and more.

And, just in case I had begun to think I was becoming a bit of a guru on this online relief thing, my collaborators taught me something new. One post, titled 'How Can We Help You?' got a few hundred comments that night. It became a de facto forum, with people leaving names and phone numbers of their relatives, and others popping up to make calls, send SMSs and confirm that yes, your brother, your friend, your aunt, was indeed safe.

AND SO WE'RE THE BEST THING THAT HAPPENED TO THE WEB, RIGHT?

I have heard talk about how SEA-EAT and subsequent efforts have outdone big media. I don't believe a word of that. It is a fact that we did get a lot of attention, and that, ironically, was thanks to media coverage of some of the things we did. Did we supplant big media, do their jobs? Heavens, no! Our biggest successes in terms of traffic were SEA-EAT, which got a million viewers in about eight days, and the Katrina wiki, which got that much in a day.

For the big media sites, those figures are peanuts. None of them is trembling in fear of bloggers yet, I'll wager. Citizen journalism, even the segment that WWH specialises in, online relief aid, only supplements the efforts of the media, of formal relief agencies, of government bodies. But here is the thing. There was a week on the cusp of 2004–05 when one million people didn't find what they wanted anywhere else. When Katrina



hit, a million others couldn't find the information they needed elsewhere that day. When the bombs went off in the Mumbai local trains, 40,000–50,000 people didn't find what they were looking for in the media. We were able to reach out a hand to them, in our small way. We lit our candle, and showed we cared.

Author's Note: *I earn my living as a writer and communicator, and I can get pretty evangelistic about blogs, but for the longest time, I was unable to write about SEA-EAT. I talked about it a lot to friends, answered e-mails from researchers and students, was even interviewed about it several times. But I was never able to write about it. I really don't know why. Until a friend/fellow blogger and journalist/contributor to SEA-EAT, Jai Arjun Singh, who was writing an article for a national newsmagazine, mailed me a few queries as part of his research. As I sat down to reply to him, suddenly the words broke free. I spent the next few hours hammering away at the keyboard, referring back frequently to archived e-mails I had written to journalists who had asked questions.*

ACKNOWLEDGEMENT

Nilanjana S. Roy kept pushing me to write this text, despite my natural laziness. Jai Arjun Singh provided the trigger I needed, with his incisive questions. I referred to posts by Dina Mehta and Bala Pitchandi to check on my recollection of the sequence of events. Dina and Bala, Megha Murthy, Neha Vishwanathan, Nilanjana S. Roy and Devangshu Datta critiqued this account for me at various times and gave me their opinions, invaluable in fine-tuning it from the first disjointed scribbles. Shuddhabrata Sengupta gave me the extra impetus to actually complete this by giving me the opportunity to write for a recent *Sarai Reader*. And every member of all the collaborations I have been part of helped me understand the process a little better, while we helped each other refine, modify and make more useful, often on the fly, a very raw, untried concept.

(This chapter first appeared in the *Sarai Reader*, and is reproduced with permission.)

NOTES

1. SEA-EAT: <http://tsunamihelp.blogspot.com> (blog) and <http://www.tsunamihelp.info> (wiki).
2. A portmanteau neologism I coined for collaborative weblog.
3. See <http://www.worldchanging.com/>

4. See <http://www.boingboing.net/>. Started in 1988 as the worlds greatest neurozine and focused on cyberpunk subculture, developed into a website in 1995, then to an award-winning weblog in 2000.
5. For Rediff's dedicated tsunami section, see <http://www.rediff.com/news/tsunami.htm>
6. See <http://www.sitemeter.com>. Sitemeter is a counter that many bloggers and webmasters use to track traffic.
7. For press descriptions of the TsunamiHelp effort, see http://www.tsunamihelp.info/wiki/index.php/In_the_media
8. Google's Tsunami relief page: http://www.google.com/tsunami_relief.html
9. Wikinews page on the earthquake and tsunami: http://en.wikipedia.org/wiki/2004_Indian_Ocean_earthquake
10. <http://groups.google.com/group/TsunamiHelp>
11. <http://groups.yahoo.com/group/seaeatvolunteers/>
12. Comment spam includes machine-generated spam crammed with links to commercial sites. Many popular blogs are plagued by this.
13. For the depth and detail of just one aspect of Megha Murthy's redesign of SEA-EAT, see <http://www.meghalomania.com/expand-collapse-script-for-blogger-blogs/>
14. For details, see <http://balaspot.blogspot.com/2005/12/how-my-life-changed.html>
15. Yahoo!Messenger lets multiple users text-chat simultaneously. We used this like a conference room, staying logged in, but also chatting one-on-one in private windows. <http://messenger.yahoo.com/>
16. Flickr is a photo-hosting site (then comparatively new) that permitted tagging of pictures, group pools and a degree of social networking. <http://www.flickr.com/>
17. For the workgroup page, see http://www.socialtext.net/tsunamihelp/index.cgi?who_s_doing_what
18. ARCs current status can be checked at <http://www.socialtext.net/tsunamihelp/index.cgi?arc>
19. Progressive Tsunami Help: <http://progressivetsunamihelp.blogspot.com/>
20. Skype is a Voice Over Internet Protocol provider. The service lets you make calls not just from Skype user to Skype user, but also to and from landlines. <http://www.skype.com>

WORLDWIDEHELP GROUP LINKS

SEA-EAT / TsunamiHelp main blog: <http://tsunamihelp.blogspot.com>

Sub-blogs:

<http://tsunamienquiry.blogspot.com/>

<http://tsunamimissing.blogspot.com/>

<http://tsunamiupdates.blogspot.com/>

<http://tsunamihelpwanted.blogspot.com/>

<http://tsunamihelpoffered.blogspot.com/>

<http://www.tsunamihelp.info> (wiki) Cloudburst Mumbai:

<http://cloudburstmumbai.blogspot.com> Mumbai Help:

<http://mumbaihelp.blogspot.com> (blog); <http://mumbaihelp.jot.com>

(wiki) Katrina Help: <http://katrinahelp.blogspot.com;>



<http://katrinahelp.info> Rita Help: <http://ritahelp.blogspot.com>;
<http://ritahelp.info> Quake Help: <http://quakehelp.blogspot.com>
 (blog); <http://smsquake.blogspot.com/> (SMS-to-blog failed
 experiment); <http://quakehelp.asiaquake.org/> (wiki) Avian Flu
 Help (H5N1): <http://avianfluhelp.blogspot.com/> WorldWideHelp:
<http://worldwidehelp.blogspot.com>; <http://www.worldwidehelp.info/>

FURTHER READING

- 'Tsunami Crisis: An Analytical World View.' See Inteliseek's Blogpulse: <http://tsunami.blogpulse.com/>
- 'Open Source Disaster Recovery: Case Studies of Networked Collaboration.' Study by Calvert Jones and Sarai Mitnick of the School of Information, University of California, Berkeley. In First Monday, http://www.firstmonday.org/issues/issue11_5/jones/index.html
- 'Tsunami Blog among 10 Most Popular Humanitarian Sites.' See Hitwise, http://www.hitwise.com/press-center/hitwiseHS2004/tsunami_010105.html
- 'Social Tools: Ripples to Waves of the Future.' See Dina Mehta's blog, Conversations with Dina, <http://radio.weblogs.com/0121664/2005/05/29.html#a630>
- 'How My Life Changed.' See Bala Pitchandis blog, Balas Ramblings 2.1: <http://balaspot.blogspot.com/2005/12/how-my-life-changed.html>
- For commentary on blogs and the media, see 'We, the Media,' script of a speech by Ashok Malik at the Asian School of Journalism, Chennai. <http://wethemedia.blogspot.com/2005/11/ashok-malik-on-blogs-and-media.html>
- History of Blogic. Articles by Jai Arjun Singh, Amit Varma and T. R. Vivek in Outlook, Volume XLVI, Issue 1, 9 January 2006, p. 60. For online text (subscription required), see <http://www.outlookindia.com/full.asp?fodname=20060109&fname=H4Bloggers+%28F%29&sid=1>
- 'The Coming of Age of Citizen Media.' See Jane Perrone, in the Guardian news blog. See http://blogs.guardian.co.uk/news/archives/2005/12/26/the_coming_of_age_of_citizen_media.html



SECTION SIX
Photojournalism



Stop All the Clocks! Beyond Text, Looking at the Pics

Max Martin

A disaster, or a conflict, can spell an abrupt halt to everything we know and live with. The sea turns into a demon, the earth devours villages, neighbours turn into killers. A photographer freezes these dramatic moments and showcases them to the world. These images generate shock, information, compassion, awareness, policy changes, mass action (as in the US during the Vietnam war) and even entertainment, in a perverted sense. It takes a while to get the clock ticking again. If the cameras stay back, as it only rarely happens, then they can record the budding of life once again, moment by precious moment. This article tries to explore the challenges of disaster-linked still photography from a media professional's perspective. It argues that disaster photography needs to break away from the constraints of time and space.

There is work to be done—both before the clock stops, and after it restarts. By the very nature of disaster, it is the sheer drama and scale of the event that attract media photographers. They look for shots that sum up 'the drama, spirit and courage in the face of a disasters', as Thomas E. Franklin said about his famous still of the flag raising at Ground Zero on 9/11.¹ That was a 'decisive moment' as the legendary French photographer Henri Cartier Bresson would have called. It is all about being at the right place at the right time, when history happens. This is the essence of good field reporting using any medium—text, sound or visuals. A discerning photographer can combine this classic time and space formula with his or her heart, head and hand to produce lasting memories.

UNFORGETTABLE IMAGES—FROM HOME

Closer home, the tsunami produced a set of unforgettable images. Perhaps the most telling one about the sorrow of this tragedy was a picture taken



by the Reuters photographer Arko Datta, showing a woman lying on sandy ground, mourning a dead relative. It became the World Press Photo of the year 2005. One of the jury members called it 'graphic, historical and starkly emotional'.² In fact, this photograph's power lies in its understatement, the respect shown to the subject in keeping the bloated body beyond the frame, showing only the hand. At the same time we also saw a flood of images, rather less respectful—mountains of bodies, bulldozers burying them en masse, bawling relatives.

The boundary between reporting and disaster pornography often became very thin and contested. How much human suffering can actually be shown visually in the media depends on where the disaster or humanitarian tragedy occurs.

An unwritten rule of thumb seems to be that the poorer a region is, the more graphic the international media's disaster coverage would be. Few dead bodies were shown in the visual media coverage after the 9/11 attacks in the United States. But the emaciated, naked bodies are staple for reporting on African famines while piles of dead bodies are routinely and explicitly shown in the aftermath of earthquakes or floods in other parts of the developing world. The presence of cameras at the wrong spot aimed at a wrong angle is bad enough, but worse is their absence when people need it the most: after the last aid van has departed. The cameras vanished from the scene once the drama was over for the tsunami. The media interest waned and the assignment charts got filled with election campaigns, corporate results, celebrity lifestyles, wildlife and other assorted beauty pageants. And we had our fair share of disasters in the subcontinent. When the tsunami-affected people were rebuilding their lives, living in hot, humid, temporary shelters in all the affected countries, press cameras were often not there to tell the story to the world. If the international media played its role as the witness, thousands would not have suffered in shelters dubbed as shoeboxes, saunas and ovens across southern Asia.

Fires and floods would not have displaced many of these people again and again. In the suburbs of the south Indian city of Chennai, racketeers thriving on an organ trade would not have approached them with disgusting offers. Still, people showed their resilience and survived with dignity. They resold boats that did not fit their fishing patterns—sometimes to the aid agencies themselves. They also exchanged extra blankets for saris. They further insisted that selective, piecemeal, discriminatory charity would not work. Cameras were just not there to capture small acts of courage in the face of a disaster that seemed to have no end.

Across the region, the newfound peace in conflict-stricken northern Sumatra tip of Aceh in Indonesia, and that reached amidst disasters recovery and the broken ceasefire in Sri Lanka, were news events for the world. But the visual representation of these events in the international mainstream media was predominated by guns—up or down in accordance with the story—and politicians and commanders shaking hands and smiling before the flashbulbs. It was not very easy to find pictures of people rebuilding their lives after the tsunami in Aceh two years since the disaster. And the Trincomalee (Sri Lanka) fisherman who had to flee his rebuilt house amid crossfire between the militants and the military did not find a camera to tell his tale. The renewed conflict in Sri Lanka sent over 16,000 new refugees to India. Their clandestine journey across the choppy Palk Straits in overcrowded small fishing boats, often at night, is perilous and dramatic by any count. At least 18 people died in capsizes and accidents in 2006, many were stranded in the shoals that make the Adam's Bridge. But when did you ever see a striking 'boat people' picture? Committed photojournalism involves getting one's feet wet. It requires resource support, sound editorial decisions and, above all, bold photographers. Even all these may not work if there is no media interest in the plight of a set of marginal people. Media memory is indeed short.

The very life of the media lies in its ephemeral nature. It is all about here-and-now happenings. This concern with ephemera is in fact the bane of the media. We, reporters, tend to switch off our senses to what goes on then and there. Still, persistence of memory, some long-distance telephone calls and a little bit of imagination might help a text reporter to reconstruct a remote event and connect it to the present. But for a photographer, life revolves around here-and-now happenings. For a follow-up, she or he will have to take a flight and land on the spot and search diligently for the actors of the drama long after the curtains are down. Or the editor may have to commission somebody closer there. Such time and resources are seldom spent by media houses on development stories. At the same time, the local media that can actually cover processes on ground fail to create enough momentum so that national, regional and international media get to notice what is going on at the ground level. Getting wide coverage of local issues like disaster rebuilding is like the making of an avalanche. It has to roll on to gain size and momentum.

HUMANITARIAN WORKERS, VISUAL COVERAGE

Humanitarian workers argue that it is important to have visual coverage at all phases of disasters. While disaster images generate compassion and



policy interest, the follow-up coverage is essential to keep-up the interest and to ensure transparency and accountability.

‘Photographs offer a good reality check,’ says Dr Unnikrishnan PV, an emergencies and conflicts advisor for ActionAid International. ‘They can alert the humanitarian and the government system and help initiate action.’ This globetrotter medic advises photographers to go beyond the roadsides and highways, to the remote corners where the real story lies, and witness the resilience of people. Walking an extra mile and getting closer to people always produces good pictures. As the famous conflict photographer James Nachtwey says about his style that a photographer has to operate in the same intimate space that the subjects inhabit.³ While dealing with people caught up in disasters and conflict, this closeness matters. It blunts the predatory edge of the camera. The photographer becomes a visitor, rather than a nosey intruder. Once the photographer knows the first name of the person she or he is shooting, it becomes a bit difficult to be offensive with the camera.

The Dutch photographer Peter van der Houwen, who published a book and held an exhibition titled ‘Resilience’ on people recovering from the tsunami across Asia, shares Nachtwey’s view. ‘The challenge is getting closer to people,’ he would often say. He befriended his subjects with Polaroid prints and small talk—and sometimes serious debates—before setting up his large-format analogue cameras. This relaxed style is an antithesis to the shoot-and-scoot dictum of the digital era—a departure from the remote, or rather removed, telephoto-mode operation. A photographer can be detached, but not wholly cut-off, from the people suffering when he or she is covering a disaster, or its aftermath. If the concern for one’s fellow-being is an important factor of photography, then it can get translated into some pre-emptive coverage of would-be disasters. Those living perilously close to flood-prone rivers, lightning-speed highways and storm-exposed coasts can become subjects of futuristic news. For many of these subjects, the clock is still ticking and the world does not know or care about the risks they are exposed to.

Photography, like text-based reporting, can have a prophetic role in the sense that it can predict and depict trends. The media agenda cannot be set from the field alone. There are issues of power dynamics, economic constraints, editorial taste and political imperatives that influence media choices. Still, a strong storyline and a promise of stunning visuals coming from a photographer’s end would be irresistible for any newsroom. One way to promote better visual representation of disasters and conflict, and also of the people caught up in them, would be to empower photographers. They should be able to make their own storylines, charting out their own

assignments. Some of the training sessions of the World Press Photo are aimed at developing better storylines. Such a trend has yet to catch up in the Asian media. Besides, the mainstream media in South Asia has yet to experiment with the photo possibilities offered by the digital technology and new age design and the use of multimedia. It requires quite a number of operational changes in the tradition-bound newsrooms and dark-rooms. Most of the editors in the region are text-driven, and all over the world too they have a background in text reporting or editing. So changes also need to reach the top.

The way photographs are used can be innovative and quite effective. There is a trend of publishing a series of photographs in a series structured as if in a movie and telling the tale—sometimes followed up by sound, video and multimedia clips in a web version. Such innovations can have a tremendous influence on humanitarian news coverage that often gets very little attention. Meanwhile, it may be worthwhile for Asian photographers to find opportunities to see the work of one another and to learn about their neighbouring countries. Disasters that have recently hit the continent—like the tsunami, the Kashmir earthquake and some floods in the sub-Himalayan region—did not respect national boundaries. There is no likelihood that future events, especially the climate-change related disasters, would be restricted to specific countries. There have been attempts, with varying degrees of success, in dealing with disasters in a cross-border manner. Photography too should think and move beyond political borders. In this age of the internet revolution and instant transmission of images, there is a good case for photographers, especially those covering disasters and other emergencies, to work and learn beyond borders and pool their work. While this chapter was being written, scientists from across the world were meeting in Bangalore in south India, probing the secrets of the monsoon—learning how the currents of equatorial Pacific and the winds of northern Atlantic influence this pan-Asian phenomenon. Such a photogenic and life-giving, yet hazard-prone, happening like the monsoon is a good starting point for Asian photographers to break the barriers of time and space.

(This article was earlier published in Communicating Disasters: An Asia Pacific Resource Book, edited by Nalaka Gunawardene and Frederick Noronha.)

NOTES

1. See <http://www.arlingtoncemetery.net/fireman-01.htm>
2. See http://news.bbc.co.uk/1/hi/world/south_asia/4257127.stm
3. See <http://archive.salon.com/people/feature/2000/04/10/inferno/index1.html>



What Does One Photograph Do To Depict a Flood?

Shahidul Alam

A LONG JOURNEY

As we boated through the branches in Jinjira we found a wicker basket in a tree. The family had long since abandoned their home, and their worldly belongings, gathered in that basket, waited patiently for their homecoming.

The worst flood in a hundred years? That statistic is hardly relevant. They, as those before them and after them will always face the floods. How does it matter whether they are 60 per cent starved or 75 per cent starved? How does it matter what country the relief wheat comes from? They themselves are mere statistics to power hungry politicians.

What is relevant are the feelings that have been kindled, that half kilogram of rice that has been shared, that solitary dry house that has warmly welcomed all who have needed the shelter. That others have shared the pain. What is relevant is that now the roads are dry and the walls repainted and that a nation that once so cared has so quickly forgotten. I look back and merely feel the ineffectuality of my images.

The envelope from Sri Lanka arrived on Boxing Day 2006. Priantha and his daughter Shanika had sent me Christmas greetings. I felt bad that I had not sent them one. When Jolly's son Asif asked me to take a portrait of him and his new bride Rifat, I took it on with grandfatherly pride. The photo session was booked for Sunday morning, 26 December 2004. That too had been Boxing day.

While I played around with the studio lights, Asif told me of the Richter 9 earthquake that had hit Bangladesh. Of course I didn't believe him. Richter 9 is big and there simply couldn't have been an earthquake of such magnitude without anyone registering it. But I did turn on the news

immediately after the portrait session, and the enormity of the disaster slowly sank in. I rang Rahnuma and asked her to turn on the television, and went back to work. By then however, the news of the carnage in places thousands of miles away started coming across the airwaves.

The next day the numbers steadily rose from the hundreds to thousands and we were glued to the set. Though we hadn't said it out loud to each other, both Rahnuma and I knew I had to go. BRAC had organised a training for women journalists in their centre in Rajendrapur on the 28th. I had committed myself to the training some time ago and couldn't really bail out in the last minute. On the way I heard from Arri that my friend in Colombo, Chulie de Silva, was missing. I kept losing the signal on my Grameen mobile phone on my way to and from Rajendrapur, but near Dhaka I managed to get text messages through. Chulie was safe, but her brother had died.

TOURIST-CENTRIC REPORTING

My travel agent, Babu Bhai managed to get me a flight the next day. There are no direct flights from Dhaka to Colombo and I left on 29 December, the first flight I could get, via Bangkok. I had posted an angry message in ShahidulNews in response to the tourist centric reporting in mainstream media and many friends responded. Margot Klingsporn from Focus in Hamburg wired me some money. Not waiting for the money to arrive, I gathered the foreign currency I could lay my hands on, packed a digital camera and a video camera along with my trusted Nikon F5 and left.

I didn't have a very clear idea of what I would do once I got there. Dominic put me in touch with wildlife photographers Rukshan, Vajira and some other friends who had all gotten together to try and get relief goods to the worst affected areas. Margot and others had also helped. Dominic and I had bought some stuff, but it was pale in comparison to the truckloads that Rukshan and his friends had put together. Our convoy of twelve vehicles followed the two lorries through Ratnapura, Pelmadulla, Timbolketiya, Uda Walawe, Thanamalwila, Wellawaya, Buttala, Moneragala and Siyambalanduwa until we came to the Lahugala military camp.

It was there that we realised that our planning was less than perfect. The initial outpouring of support had resulted in places being overstocked, while we heard of other places which had received nothing. A military anti-landmine vehicle helped pull one of our lorries from the rainsoaked fields, and except for a small amount of rice, lentils and medicine which



we left for families most in need, we put things back on the lorries to be returned to Colombo until we had a better idea of what to do. Soaking in the rain, we piled back the tons of rice, milk powder, medicine, soap, clothes and all the other things we had emptied from the vehicle. While the others headed back, Rukshan, Vajira and I went on to the eastern coast of Pottuvil. There was an eerie emptiness. Only the scattered toys and other remnants gave away the fact that there had been a vibrant village. There were no bodies, no sounds, no wailing for the dead.

As a Bangladeshi, I was used to disasters, but the spontaneous collectives that would form when we were kids, singing songs, collecting old clothes from door to door, forming community groups who tried in their own way to stay by the needy, seem to have given way to the more 'official' methods of relief. Nowadays NGO efforts and organised disaster management seem to be our standard responses. Our own efforts seem to be restricted to the prime minister's relief fund. In Sri Lanka, I could still sense the outpouring of sympathy that people felt for their fellow beings.

STORIES OF COMPASSION... AND BRAVERY

I came across wonderful stories of human compassion and bravery. And while I lamented the lack of early warnings and the bureaucracy that prevented those who knew, from warning those who didn't, I still came back convinced that it would take much more than tsunamis to tame the human spirit.

That was when I had initially made friends with Shanika.

She had clung on to her dad Priantha when she realised we were near to the sea. She had been in her aunt's house in Hikkaduwa which had survived the waves. But she had felt the fury of the sea. It had taken away her mother, her twin sister and two other sisters. It had taken away their home. The sea was to be feared. She did not want to go back there, photographs or no photographs. Priantha tried to explain that it would be safe, but Shanika was not convinced.

It was my digital camera which changed things. Most people in the sub-continent love being photographed. The joy of seeing her own image instantly brought a smile to Shanika's face, and soon we were friends. She took photographs of her dad, her aunt and of me. Soon she was taking photographs of me by the sea, but telling me to be careful! We had sad eyes when we parted.

As a photojournalist we are touched by, and touch many people's lives. Sometimes, not often, we are able to make a difference. But invariably

we move on—on to another disaster, another success, another story in the making. More than the wreckage and the rotting flesh, I remember the mother in the refugee camp stealing a kiss from her new born child. I remember the family sitting in the wreckage of their home in Hikkaduwa, going through the family album. I remember the devotees returning to the Shrine of Our Lady of Matara Church to pray.

It was Chulie who helped me trace Shanika again. She had heard my story and wrote to me that she had found a ‘Shanika Café’ near Hikkaduwa. We had gone out together in search of the girl. When we did find Shanika and her dad Priantha, she rushed to my arms. Through Chulie’s translations Priantha told me that Shanika had been withdrawn and wouldn’t relate to people. It was our friendship that had brought out the little girl. The Shanikas of our stories often become the stepping stones in our career path but the Christmas cards flow only in one direction.

A year later I was in Kashmir where another earthquake had taken its deadly toll. I hadn’t been able to go immediately afterwards. But it was the advent of winter and I was worried about the people out in tents.

It was Amjad the driver who brought it home as we approached Ballakot, when he said, ‘This was a city. Now it’s a graveyard.’ This time the waves were different. Entire mountainsides had flowed like liquid, crushing all in its path. It was in December that we met a family in a remote mountain near Neelam. Fatema’s husband had been crushed by their falling roof. Her mother-in-law had been hurled below, had survived the fall, but died of a heart attack when she heard of her son’s death. They had not come across the army, government officials, NGOs, but as in Muzaffarabad city, they were just getting on with their lives, rebuilding their homes before the snow closed in.

Winter came and went. Many survived the bitter chill, but months later, and nearly a year on, much of the talked about reconstruction was yet to be made. The pledges seemed to have been forgotten. I went back to Kashmir.

The valleys of the fertile land were green with new crops, but many of the homes were still to be rebuilt. As I walked through the rubble, the kids again wanted to be photographed. Najma came running, her bright red dress popping out of the green maize fields. Unsure at first, she smiled when I told her she had the same name as my sister.

Zaheera, a cute girl with freckles, gathered her friends and sang me nursery songs. But my thoughts are far away. Despite the laughter and the nursery songs, very different sounds enter my consciousness. I remember the children screaming on the night of 25 March 1971 when I watched in



helpless anger as the Pakistani soldiers shot the children trying to escape their flame throwers. The US had sent their seventh fleet to the Bay of Bengal, in support of the genocide. Today, as I remember the Palestinians and the Lebanese whom the world is knowingly ignoring, I can hear the bombs raining down on Halba, El Hermel, Tripoli, Baalbeck, Batroun, Jbeil, Jounieh, Zahelh, Beirut, Rachaiya, Saida, Hasbaiya, Nabatiyeh, Marjaayoun, Tyr, Bint Chiyah, Ghaziyeh and Ansar and I hear the screams of the children. Piercing, wailing, angry, helpless, frightened screams.

News had filtered through of the children killed in the latest bombing. The photographs kept coming in, horrific, sad, and disturbing. Mutilated bodies, dismembered children, people charred to ashes, but none as vulgar as those of Israeli children signing the rockets. Death warrants for children they've never known.

The Lebanese and the Palestinians were people without names. Their pain did not count. Their misery irrelevant, their anger ignored. Sitting in far away lands, immersed in a rhetoric of their choosing, conjuring phantom fears necessary to keep them in power, hypocritical superpowers failed to acknowledge the evil of occupation. The 'measured response' to a people's struggle for freedom would never in their reckoning allow a Lebanese or a Palestinian to be a person.

When greed becomes the only determining factor in world politics. When the demand for power, and oil and land overshadows the need for other people's survival, I wonder if those screams can be heard. I wonder if those Israeli children will grow up remembering their siblings they condemned. I wonder if through all those screams the war mongers will still be asking, 'Why do they hate us?'



It Was a Long Journey

Nandan Saxena

It was a long journey.

On my way, I met many, who drank from the same river.

Some even called it 'Mother'.

Many could write prosaic poems on how the River had sustained life and cradled civilisation.

Most did not understand the vital link between the womb and life.

And all of us treated it as a receptacle of waste.

*A glorified sewer, it was once called 'Yamuna', when it was still a river...
somewhere in my previous life.*

I was travelling from Yamunotri, the source of the river, to Allahabad where it meets the 'Ganga', 'commissioned' by the Government of India to make a documentary on the river and the new magic potion for cleaning it—the 'Yamuna Action Plan' (YAP-1).

At Hanumaan Chatti, the road came to an end. The 13 km-trek to Yamunotri began. Enthusiasm took us as far as Kharsaali, the village of the Pandavas. Thence to Yamunotri was another steep climb, which the battle-weary legs of two city-bred filmmakers refused to take.

We chose the best-mules on display. No, the looks mattered least, we went by nomenclature.

As we took off, we wondered if the Insurance Companies in India have an innovative instrument that insures the back and necks of mule-back journalists. Thirty minutes into the winding steep dirt-track, we hit a traffic jam. The mule-driver muttered under his breath. As we watched from our precarious perches atop two of them, Baadshaah and Rani answered nature's call. Shah-Rookh, carrying our precious camera gear, followed suit, exactly at the same hallowed hairpin-bend puddle where the ones that preceded him had relieved themselves.

Involuntarily, I thought of the human parallel.



The stream of my consciousness took me to the Low-cost Sanitation (LCS) units in the slums of Delhi where a recent photographic assignment took me. These pay-per-use toilet-blocks were to be run by contractors. However, most of them ended up remaining locked, for the slum dwellers chose to urinate and defecate just outside the periphery of these blocks as before. They did not want to make the contractor richer by relieving themselves on his turf.

The mule-train trudged on.

YAMUNOTRI

Yamunotri is a picture of serenity. This is where the five streams from Champasar glacier merge to make the Yamuna and cascade down the Bandar Poonchh range, providing a scenic backdrop to the Yamunotri temple. Devotees throng this small temple-village. The Yamuna looked pristine from the temple. We decided to go down and touch the water. It was a mistake.

The water meandered through well-worn pebbles and mounds of rubbish. Polythenes, crushed plastic bottles and garbage from the dhabas or eateries littered the river-bank. The time-honoured tradition of waste-disposal in the ecologically sensitive Himalayas is followed here as well. Rubbish is just thrown into the valley. The rain and the river take it downstream. This is waste-disposal in the 21st century.

It was not just garbage. As we travelled alongside the river, a number of sewers emptied their bowels into the Yamuna. It set me thinking. What is our water management policy?

Adding sewage here, cleaning it downstream for drinking, adding sewage again, and cleaning it yet again for drinking. This is public policy befitting a banana republic. How did we allow this to happen to us?

The city of Delhi has seen many reincarnations: eight at the last count. However, at no point of time was the water management such a problem (leaving aside the case of Tughlaqabad which was abandoned for lack of potable water). The British Raj effected a paradigm shift in our sensibilities. We started treating our holy rivers as receptacles of refuse. With time, they were rechristened as drains. The example of what we call Najafgarh Drain is a case in point. Not many know that this was once a tributary of the Yamuna.

Till the 1960s, the Yamuna was clean enough for people to swim and fish in it. I met boatmen in Delhi who told me stories of the *gharials* and the turtles that once called it home. In the 1970s and 1980s, industrial waste

started finding its way into the river. Unscrupulous petty politicians settled migrant labour in riverside slums having limited sanitation facilities. With time, the people's voices were muffled by the political and bureaucratic Mafiosi. (Is it really that strong a word to use?)

Now they could do whatever they fancied. The banks of the Yamuna and its floodplain were progressively encroached upon.

A worthy leader wanted the river diverted to build a shopping mall overlooking the Taj Mahal at Agra. Despite the media presence and the strong brigade of armchair environmentalists, the Akshardhaam Temple in Delhi and the proposed Commonwealth Games village are bang in the middle of the floodplains.

But who cares?

Some people do.

'Yamuna Jiye Abhiyaan' and other NGOs have been agitating for saving our commonwealth—the Yamuna from another politician-ordained encroachment. Only that the average Dilli-wallahs are least interested.

Time has come full circle.

The river, once revered as the Mother, has turned into a faceless receptacle of waste. But the government cannot be perceived as doing nothing. If it actually does nothing, then how will it make money for the next elections?

YAMUNA ACTION PLAN

Once the hogwash 'Ganga Action Plan' was erased from the proverbially short public memory, the government came out with the 'Yamuna Action Plan'. To have an 'Action Plan', surely one must have a cogent, well-considered 'policy'.

I shuddered, and it broke my reverie. One must think positive, I decided. Surely, this one is going to work (YAP-I launched in 1993). When the Yamuna Action Plan was launched in 1993, it was touted as the magic potion like the one that gives Asterix the power to complete impossible tasks.

And the potion was a gift from Japan. About 70 per cent of this Rs 700 crore plan was funded by a soft loan from Japan Bank for International Co-operation (JBIC). The Babus in the ministry gleefully spent it, as if it were a dole. The entire emphasis was on budget allocation, getting the agreed commissions and budget utilisation certificates. Along the way, some infrastructure got created. After all, they had to have something



to show. Whether or not the quality of the river-water changed, is well, another story.

The honest tax-payer will have to pay for this scam in the name of a river-clean-up. Today, as the YAP-II is under implementation, another Rs 624 crore is going to go down the Yamuna.

STP-TECHNOLOGY

The major component of the YAP-1 involved improving the drains and pumping stations and setting up of Sewage treatment Plants or STPs to treat the sewage before it drains into the Yamuna. Only if the entire sewage load were to be treated!

STPs were designed for Upflow Anaerobic Sludge Blanket or UASB Technology, rejected by most forward-looking nations as being non-sustainable. Urban areas today do not have the land area needed for these space-intensive plants. The sewage treatment capacity was far below the sewage generation in the towns these were set up. This meant that some sewage went untreated into the river, defeating the entire purpose.

There were other issues: sewage had to be carried over long distances to these STPs. This required extensive pumping for those who designed the sewers did not remember the laws of gravity. To push this sewage-load across the lengthy drains, a lot of fresh water was needed—Another case of spending good money over bad money. The pumps and the STPs thus worked half of the time, when electricity was available.

The holding time needed for the anaerobic bacteria to convert sewage into slurry and for the slurry to dry into usable cakes was seldom given. As a result, partially treated sewage was discharged into the river or taken for irrigation.

CREMATORIA

Besides the sewage component, there were minor components like building improved wood crematoria and electric crematoria. While the former lost out because otherwise sane people, guided by orthodox Hindu priests, would not agree to burn their dead on a metal berth, where the body is not in touch with the ground. So what if it optimises the combustion process and saves half the wood!

The same people start using these improved crematoria during the rains for there is a canopy on top and the rain does not disturb the performance of the last rites.

The problem with the electric crematoria is that they need constant supply of electricity at proper voltage. Now, is it not too much to ask for? Surprisingly, the ones at Delhi too are underutilised. I plan to put down in my will that we should give these idle facilities some business when I am no more.

COWDUNG AT KARNAL

We saw Khataals or dairies on the riverbank. The cow-dung and urine was drained directly into the river. In Delhi, the dairy-waste from the many dairies like the cluster at Ghazipur goes to the non-descript drains that ultimately join the Yamuna. But cow-dung seems benign when compared to the damage caused by industrial effluents.

Mr INDUSTRIALIST, WHERE IS THE EFFLUENT GOING?

The government and the enforcement agencies know that most industries generate toxic waste. Under the benevolent gaze of municipal inspectors, effluents are dumped without ceremony into the gutter. The solid waste is dumped on any piece of fallow land, mostly into water-bodies. Have we noticed how the incidence of cancer has increased exponentially over the past four decades?

There is incentive for the enforcement agencies not to check this. Perhaps they plan to export their progeny to safer Canada or Switzerland once our piece of earth becomes too toxic to live. Who is accountable? Our worthy politicians, enforcement agencies or the industrialists?

Is the media too busy plugging stories to run a sustained campaign to expose this nexus and get corrective action initiated? No water-treatment plants can distil potable water from this sewage-effluent cocktail. We do not have the expensive technology to remove heavy metals and carcinogenic toxins from the water.

If the common man were to wake up to the reality that he is consuming purified sewage everyday, there will be mayhem in the country. Or will there be? I do not know. Maybe we have lost the capacity to protest, maybe there is no fire in the belly anymore, maybe we will settle for the sewage.

The Yamuna Action Plan is tracing the footsteps of the infamous Ganga Action Plan. This is tragedy in the making. The failure of the Yamuna Action Plan will shake the faith of even die-hard optimists in governmental action. The dented pride of India Shining will take yet another beating.

IS IT A RIVER?

By the time we were through with the production schedule of the film, we had literally seen the entire length of the river from its major stopovers. Like a good journalist and a keen student of the Documentary, I faithfully recorded how Man interfaces with the River.

When we interviewed noted Gandhian and environmentalist Anupam Misra for the film, he pointed out that dammed by the government, the river died long ago. What now exist are a series of lakes on the same river-bed. The basic premise of a river is based on flowing water. When the river is dammed at Tajewala Barrage at Yamunanagar, the Eastern and the Western Yamuna canal siphon off all the water. I have photographed the trickle which cannot be called a river even in the nuanced parlance of parliamentarians.

Again at Wazirabad, we sweet-talked the policeman on duty to permit us to film how the barrage dams the river. To meet Delhi's requirement of about 240 million gallons of water per day, the water is diverted, upstream of Palla village, to the Chandrawal Water Works. There is no flow of freshwater in the Yamuna at Delhi barring the monsoon months. Instead, we add 950 million gallons of sewage to the river everyday, in the 22 km it takes to exit Delhi.

How do we explain the differential between the 240 million gallons we took and the 950 million gallons we add? The differential is the quantum of ground water we extract everyday. Almost every household has a submersible pump, to augment the fickle water supply of the Delhi Jal Board. The underground aquifers are being milked dry.

We feel that it is our right to draw upon these aquifers; the industrialists believe it is their birthright to add toxic chemicals and heavy metals, and the politicians-wedded to their chair-know that they cannot afford to ban any of this or they will lose votes.

Now, on hindsight, I realise that we saw almost everything that is wrong with the river, and yet, we missed the simple truth that it is a river no more. It depends on each of us whether we write an obituary for the river or take a deep breath and commit ourselves to saving it for our children.

SERMON TO THE MEDIA

Understand the big picture. Don't work piece-meal.

Ecology is serious business. Let us not treat it as a routine beat. Prepare the ground for a Policy re-think. Give a picture of the global situation and how river clean-ups are taking place. Attack the politicians over their insensitivity, policymakers and think-tanks over their myopia and the people for their lackadaisical approach to the fundamental necessities of life. Who am I to take the pulpit and preach? Why should the Media Barons pay attention?

Why should this diatribe divert the attention of the politicians from matters of importance like creating SEZs, announcing more reservation and taking the pants off their rivals. Why should the people stop watching cricket and the daily Saas-Bahu soaps on their telly, to read this nonsense?

Why?

They should just get up, fill a glass of water from the tap and try drinking it. If it smells of sewage, they shall know it is time to wake up.

Box 26.1: The journey of the film: 'Yamuna'

I had kept the film subtle. 'The rapier of irony is more effective an instrument than the bludgeon of insolence', I had read somewhere. In any case, how else was one supposed to get past the Preview Committee?

I thought it would be a masterstroke if one got the Ministry and Municipal Corporation of Delhi (MCD) to disseminate a film that questioned the very premise of the River-policy of the Government of India. Once the film was made, we screened it for the officials of the Ministry and the MCD.

Everybody was fixated on the visuals of men effortlessly defecating on the banks of the Yamuna. The ladies were embarrassed and wanted these offensive visuals out of the 'documentary'. Over the next two screenings, more such offensive X-rated content was censored. The sanitised version was finally approved.

In the process, they did not notice the use of irony and the tongue-in-cheek script. We also got away with the strong interview bytes of Anupam Misra. Ah! I waited gleefully for a telecast, the hundred screenings planned in various localities and the proverbial ripple effect.

But the Babus of the Government of India had the last laugh.

(Box 26.1 Contd.)



(Box 26.1 Contd.)

The video-van with a gleaming expensive projector and our film rotted in their stores. Once the budget was utilised, the story ended. 'EoM', as the print-wallahs affix to the end of their stories.

Intoxicated by the experience of getting the film past the censorial officials with minor surgical cuts, I asked the Ministry of Environment to fund another film that explores options and approaches towards river clean-ups. Taking case-studies from technologically advanced nations, the film could help effect a paradigm shift in how we treat our wetlands eco-system.

There was a lot of interest. I followed up for one year. Nothing materialised. Maybe I was naïve. Maybe the Babus were expecting something that I did not offer.

In a country where aid meant for Tsunami victims can be siphoned off and disaster-management is a lucrative industry for the Government and some reputable NGOs, only the naïve expect honesty in public office.

Thankfully, the film got good response outside the corridors of power. It was screened at the Vatavaran Film Festival, organised by Centre for Media Studies. They have taken the film to many towns and cities. The audience always identifies with the issues raised. Though they choose to do nothing about it, everybody in the Ministry of Environment and Forests has seen the film thanks to the endless seminars on YAP.

However, the greatest reward came from children. The film was screened at many schools under the Vatavaran travelling fest, and we are amazed at the intelligent questions school children ask.

My colleague and Associate Director on this project, Kavita had a good time interacting with the sharp-shooters of class VII and VIII at Shri Ram School, Gurgaon. Encouraged, we plan to share the film and its message with other educational institutions now. Hopefully, more schools shall take environment education out of the confines of musty textbooks into the real world.

What more can a filmmaker ask for?

A clean Yamuna maybe.

Amen!

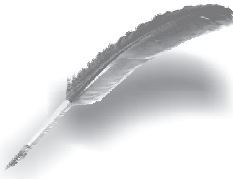
Box 26.2: YAP brass tacks

Yamuna Action Plan Phase-I (YAP-I) project was formulated on the basis of the study conducted under Special Assistance for Project Formulation (SAPROF) of the Japan Bank for International Co-operation (JBIC).

It covered Delhi, eight towns of U.P. (Saharanpur, Muzaffarnagar, Ghaziabad, Noida, Vrindavan, Mathura, Agra and Etawah) and six towns of Haryana (Yamunanagar-Jagadhri, Karnal, Panipat, Sonapat, Gurgaon, and Faridabad).

JBIC provided a soft loan assistance of JPY 17.77 billion (approximately Rs 700 crore) to the Government of India to initiate YAP-I. Launched in 1993, the project was originally planned to be completed by April 2000, which was extended until February 2003.

A new Loan Agreement between the Government of India and the Government of Japan was signed on 31 March 2003 for the current YAP-II project. The JBIC Loan Agreement provided financial assistance of JPY 13.33 billion (approximately Rs 500 crore or approximately 85 per cent of the overall project budget) to increase sewage collection and treatment capacities by constructing new and rehabilitating old sewage treatment plants and rehabilitating and installing sewers in Delhi and Agra.



SECTION SEVEN

Communicating on the
Environment



Paradigm Shift in Agricultural Communication

Shivaram Pailoor

'Farmers first' approach is a milestone in the overall agricultural development process. Accordingly there is a 'paradigm shift' in extension system away from the terminology—'transfer of technology'—towards an interactive approach entirely subordinate to the needs of the farming community. Thus, along with this emerging phenomenon, agricultural communication process has also been altered radically.

The advent of green revolution brought to the fore the importance of agricultural communication. Its approach and attitude were altered in accordance with the priorities of modern agriculture. It should be mentioned that earlier attempts in agricultural journalism drew their strength mainly from the discipline of agricultural extension and not from journalism or mass communication or even the farming community. The main idea was to transfer knowledge and skill, or, to be precise, the package of practices about various crops by scientists or subject matter specialists to farmers. Since there was no integration of extension and journalism, the agricultural journalism stagnated for many years. If we analyse the qualitative growth of farm journalism in India, the picture is not very promising.

Farm journals published by the agricultural universities and government departments continue to be extension oriented academic exercises. They emphasise empirical data wherein facts are presented as revealed by research findings. Also they limit themselves to one-way communication, thereby losing the reaction from the beneficiary. Unlike other disciplines, agricultural journalism avoided subjective imprints on facts in its own form and content. This non-interpretative method, though it had an objective edge, suffered from excessive neutrality. The use of scientific jargons and



technical terminology failed to merge into farm-level language and idiom. As a consequence, the farming sector was unable to utilise farmer-friendly research outputs. Gradually, the objectives of agricultural journalism, which undermined indigenous knowledge systems, the cultural ethos and farmers' perceptions, lost their significance.

MODERN AGRICULTURE AND INDIGENOUS FARMER

Modern agriculture has also unleashed an array of fresh problems. Increased use of pesticides and fertilisers to boost the yield affected the environment severely and proved to be hazardous with the growing threat from chemical residues in soil, water, air and agriculture produces, pest resurgence and soil degradation and drastic depletion in water table. The over dependency on modern science led to a search for corrective technology and inventions, which in turn created a hopeless no-win situation and an irreversible chain-reaction of side effects was set into motion.

The farmers, disenchanted with the recipe of modern agriculture as offered by the agricultural journalism set-up, sought alternative methods of knowledge exchange. Several initiatives exploring alternative agricultural methods all over the world demonstrate certain features like:

- Aiming at environment-friendly and sustainable approach,
- Emphasis on farmers' ideas and experience in a geo-specific context, as opposed to lab experiments and scientific data that are generalised irrespective of agro-climatic conditions and
- Striving with a holistic approach towards farming.

Another important development is the 'farmers first' approach in the overall agricultural development process. Accordingly there is a 'paradigm shift' in extension system away from the terminology—'transfer of technology'—towards an interactive approach entirely subordinate to the needs of the farming community.

Thus, along with this emerging phenomenon, agricultural communication process has also been altered radically. While presenting facts as established by research as well as in-situ findings, attention was given to need-based information. With the 'farmers first' approach, the focus was on to encourage farmers to learn, adopt and do better analysis not by outsiders' help—scientists, extension experts—but on their own. The initial ventures in alternative agricultural journalism began exploring these dimensions and pursuing new possibilities.

These efforts, countering the archetypal, narrative approach by interpretative and analytical presentation of facts, are considered by farmers to be more realistic. Various communication efforts, which are need-based, pro-farmer and involving farmers' participation, have sprung up all over the world. The agricultural media, which stresses the need for pro-farmer ideologies and practices in agricultural research and communication, is encouraging the farmers' self-respect and self-reliance.

Such agricultural media have strengthened the bond among farmers and between farmers and the research sectors. They have thrown light upon farmers' innovations and the indigenous treasure house of native technology. These media have also revealed certain other issues related to farm sector.

'Farm journal published by farmers and pen to farmers' hand' is another unique feature of agricultural media. Today, we see successful farm journals brought out by farmers themselves. It is proved beyond doubt that the information, which evolves directly from the kiln of farmers' hard earned farm experience, is more transparent, time tested and authentic.

Farmers' journals are not only disseminating farm knowledge but also operating as centres catering to the needs of local farmers. Adike Pathrike, a farm journal, published from Puttur (Karnataka State) by a group of farmers since the last 20 years seems to have expanded the horizons of agricultural journalism.

This unique success story, which relied on 'self-help journalism', has developed into a need-based knowledge exchange system. Its efforts to bridge the communication gap amongst farmers themselves, between the farmers and the government and agricultural scientists and farmers have yielded fruitful results. The journal conducted workshops in agricultural journalism for farmers and the results were encouraging. The trained farmers not only began to write about their experiences and innovations, but also began to report, interview and narrate the farming experiences in their neighbourhood.

The journal also offers free space for exchange of information about seeds and plants available with farmers for distribution. Now we find many such ventures in agricultural journalism and there seems to be some thematic patterns and ideational commonality in these isolated initiatives. The Centre intends to focus on this novel phenomenon.

Print and electronic media has played an active role in the campaigns like saving native seeds through community seed banks, organic farming, soil and water conservation. The Centre for Agricultural Media formed in



Dharwad seven years ago has been working towards strengthening this approach by training enthusiasts in writing in-depth stories on agriculture and rural affairs.

MEDIA, ADVANCED TECHNOLOGY AND EXISTENCE: THE PRESENT SITUATION

Despite technological advancement in all spheres, is it possible to grow wheat, rice and dal in factories? If we give a search for 'wheat' in Google we get thousands of links which are resourceful. But we can't live on it. We have to depend on growers to fill our stomach and subsist.

Then why does a farmer not get the due importance? Even the manufacturers of tiny needles fix a price for their product. But farmers who shed their sweat all along growing grains, coconut, sugarcane and onions are not in a position to determine price for their yield. Factories that produce tomato ketchups and potato flakes run smoothly throughout the year while the person who grows potato and tomato appeals for minimum support price after every harvest. Many times he helplessly watches his crop perishing in the field as he can't afford to harvest.

At one end there is a constant appeal for greater production to meet raising food needs! On the other side we don't have answer to farmers' plea, 'We are growing our best, please provide us market.' At the same time, the land under cultivation is shrinking every year. Recently the Karnataka government authorised five private companies to purchase 1,344 acres of farm land. According to a survey, 40 per cent of existing farmers are ready to say good bye to the agriculture provided; they get alternate opportunities.

Many expert committees have been formed to assess the situation and come out with a solution for crisis in the farming sector. These panels have given various recommendations like providing schemes for farmers on growing crops based on the agro-climatic condition in the region, and opening information kiosks for farmers. Some of the suggestions have been implemented in certain places. But these initiatives don't seem to have assured the farming community. How can a farmer who cannot harvest his onion crop, appreciate when a new variety with special properties is introduced? When he cannot sell his yield in the nearby Agriculture Producers Marketing Committee (APMC), how will the information of better rates in some other state help him?

Media has been focusing all these state of affairs but has not been following it up through its reports. A number of farm magazines along with farm supplements of newspapers have created enough space for farmer-oriented articles. Though many articles are based on the experience of farmers than filtered from the labs, they need to be more insightful.

Success stories, of course, give a new hope and vision for the rest of the farming community. Likewise, an instance of failure can stop many farmers following the same method or opting for the same technology. Considering this, stories of failure should also be given equal importance in the media as success stories. One farmer's failure may alert hundreds of other farmers. There are many constraints to run agriculture smoothly. It may be natural calamities like flood and drought, shrinking marketing opportunities, failure of a newly adopted technology in the farm or disappointing yield of a newly introduced crop. These are the issues that are very much visible and easy for a journalist to report.

But issues like endosulphan tragedy in Kasaragod in Kerala, heavy usage of pesticides in the paddy-growing belt of Koppal and Gangavati in Karnataka need to be observed, understood, felt, before giving an account. These stories are not visible. The media should focus on them to make this world a better place to live in.

RAYS OF HOPE

There are two ways to support farmers: One is physical support. It may be through various schemes of the government or financial support. Second is that the need of the hour is empathy. It is the responsibility of the entire society to be with them and give them moral support.

Physical support is much stressed in the present days. Expert committees are proposing new schemes, government is assuring support. Such assurances lead to high expectations. But when such schemes fail to live up to the predictions, they get discouraged. Farmers definitely need realistic support but at the same time they need moral support too. A farmer has to be mentally strong to face the situations. This can happen when he doesn't feel alienated from mainstream. A farmer decides to end his life only when all the ways to make a living are lost. A little compassion can help him to overcome his grievances. Serious efforts need to be initiated in this direction.

Disseminating success stories in different parts of the state might encourage farmers to experiment in their farms. Many non-governmental

organisations and farmer groups have worked to achieve sustainable development. Even at the individual level, many farmers have achieved success in farming and marketing by adding value to their produces. Small scale industries like cocum juice, vanilla powder have supported farmers. Soil and water conservation methods, vermicomposting are some other activities that have made farming tolerable. Natural farmer Cherkady Ramachandra Rao, who has achieved self-reliance in his two-acre farm, has become a model for many farmers in Karnataka. Most of the self-reliant farmers in the state have practiced farming without taking any government support.

We should observe that there is no universal model in agriculture. Every patch of land is different and so is the farmer. These possibilities may inspire a few other farmers. This might in turn wake up many more.

Kushuppanavara Siddabanavara took up mango grafting in Tergaov in Uttara Kannada district of Karnataka a decade ago. Now more than two hundred families are involved in this activity, earning good money. Their accumulated income is more than Rs 2 crore per annum. Grafting doesn't require huge investment. One has to put in dedication and hard work. Many farmers can take this example and nurture their lives. Even journalists should search for such topics that have some impact on the society. In this case, an article focusing on the grafting activity in Tergaov will boost the morale of the villagers; it might also bring some new customers. Above all, it inspires many others engaged in agriculture. When all these efforts are brought together and focused, it will not be tough to create new avenues for agriculture. Media has to play an active role in building awareness.

Bengali Venkatesh-Ganga, a farmer couple near Sirsi in Karnataka, have made it a point to add value to all possible produces grown in their farm. For example they have a nursery of coconut plants, they powder turmeric, squash of cocum, concoction of ginger, banana and jack chips (wafers). These quality products have created a strong network of consumers who buy these products regularly. Quality and trust are two major qualities of their products. Their family leads a content life with the income from his one-acre land. There are many other farmers who are specialised in processing cocum, gooseberry, vanilla, ginger, pineapple, areca nut etc. Most of them have found market for their products.

Farmer groups like Nesara in Mysore, Sahaja Samruddha in Bangalore, Punyabhumi in Hasan are successfully spreading the lessons of sustainable agriculture. Agro-based industries and farm tourism are a few other opportunities for farmers to explore.

MEDIA FOR BETTER AWARENESS

Agriculture and rural journalism is slowly gaining momentum in Karnataka. Farming sector and rural issues are covered with better awareness and conviction. Now we can see the impact of media in action. For example, ETV Kannada, a Kannada news channel featured a village near Honnavar in Uttara Kannada that doesn't have access to electricity. After few months, in its primetime news telecast, the channel featured with pride the impact of its report. The TV news triggered efforts and helped the people avail the basic necessity. Similarly, whenever there is a crop failure or a sustainable farming method comes to light, more and more media channels, both print and electronic, make it a point to report it.

All India Radio (AIR), which has high reach in rural areas, predominantly among farmers, has utilised the opportunity to spread environmental awareness. Several programmes like Iruvudonde Bhumi (Protect our Planet Earth), Beejada Buttiyallomdu Suttu (Awareness on Native Seeds) have educated the listeners about the significance of environmental conservation.

Officers Vijay Angadi and N. Keshava Murthy who design agriculture related programmes in different radio stations have successfully utilised the media to popularise organic farming. Since the programmes on AIR are interactive, people find these easy to understand. Another obvious advantage of radio is that people listen to them even when they are busy with their work. As a result, in Hassan and Mysore districts of Karnataka AIR has prompted a silent organic farming revolution, with many farmers opting for sustainable farming methods.

Both media and agriculture are at crossroads. Even as commercialisation has overshadowed concerns, we see many individuals, small efforts made in the media, to make life sustainable, in tune with the nature around us. The media, particularly regional newspapers and magazines, should instil hope in the farming community about a prosperous future.



A 'Global City' vs the Environment

Ardeshir Cowasjee

(Dawn, 6 May 2007)

The entire civilised world is greatly concerned with where the environment is going, and the world with it. The dangers facing are massive. As an entity, the government of Pakistan seems to be oblivious and carries on in its own merry way.

However, there are a few of us who realise the implications of global warming and all that goes with it. Credit must be given to one of our private television channels which, on Earth Day, 22 April, showed an Urdu translation of former US Vice-President Al Gore's award winning documentary, 'An Inconvenient Truth'. Gore's message is quite simple: if you and I do not reduce and cut back our consumer oriented and environment unfriendly lifestyles, climate change will overwhelm us and bring unpleasant and radical changes in life as we know it.

Knowing the calibre of our home-grown politicians, it is doubtful if any of those who regulate our lives have bothered to watch it. Prime Minister Shaukat Aziz was given a copy of the documentary by a delegation of civil society groups, spearheaded by the World Wildlife Federation, who met him a month or so ago to discuss the deteriorating water situation in Pakistan. Has he had time to see this documentary? If by some miracle he has seen it, has it made even a small dent in his resolve to transform Karachi—the former 'Pearl of the East', now flooded with *katchi abadis* (shanty towns), hard hit by electricity load-shedding, drowning in uncollected garbage, stinking with raw sewage which streams directly into the sea—into what he terms a 'world-class global city'?

WORLD-CLASS GLOBAL CITY?

The world-class global city (a concrete unlivable jungle poisoned by pollution) mantra of the federal government has been taken up by the

Defence Housing Society of Karachi which is hell-bent on the construction of a 14-kilometre 'Waterfront Development Project' along a public beach that does not belong to it, which will cater to the rich and infamous and be totally *awam*-unfriendly. On alternate Sunday evenings, concerned citizens have organised demonstrations on the beach road (near McDonalds), which so far have had no impact. The Sindh Environmental Protection Agency continues to ignore the environmental impact assessment of the conversion of the shoreline as ordered by the Sindh High Court.

Get-rich-quick schemes are infectious—in Karachi, as in all other cities of this blighted country. The concept of beach exploitation, with the prime ministerial blessings, has been picked up by the Dubai-based Limitless, which proposes to develop a new 68,000-acre 'city' along the Manora, Sandspit, Hawkesbay and French beaches, stretching inland to occupy the coastal fishing villages, KDA Scheme 45 and even PAF Masroor base. An amazing presentation of this 'Karachi Waterfront' can be downloaded from <http://www.youtube.com/watch?v=gzWRhoew2vE>.

Then we have our local government and its schemes for various elevated expressways, in particular the one planned to run 24 kilometres from Jinnah Bridge to Quaidabad to which numerous groups and concerned citizens have objected (my column of 8 April). The government has heeded some objections. Land is not to be taken away from the Karachi Gymkhana or the 'posh' hotels or the Christian cemetery, all of which lie along its route, and the existing rights of way will be used. A committee of 'experts' (mandatory under the Environmental Act 1997) is being formed to review public comments.

The City District Government has cleverly sidestepped several issues raised. Why has a US\$ 350 million contract been awarded without competitive tendering? What are the financial details of the somewhat murky 'annuity-based' BOT? How does the expressway fit in with the overall traffic management plans for the city? Why is the administration not first tackling the massive violations of traffic rules, unlawful parking, encroachments on our roads, and many other traffic planning-related issues? Why are public/mass transport systems not being given priority? Why is inter-port (Karachi Port Trust/Port Qasim) traffic not being managed by an economically more sound railway system?

Lending credence to the fact that the elevated expressway is already a *fait accompli* ('finder's fees' have already reportedly been paid), and that the Environmental Impact Assessment is but a window-dressing in pretence of complying with the law, is the fact that the City District Government parks' officer, Liaquat Ali Khan of the silken outfits, a couple

of weeks ago started chopping and transplanting some 2,000 trees from the centre portion of Sharea Faisal.

The Japanese care about the environment and they apparently care more about Karachi than its administration. They are prepared to give us funds to build five steel bridges in the city (runs into billions of rupees) but only if we first conduct an environmental impact assessment. Unlike the City District Government, they do not believe that an 'EIA is a professional study; only professionals should be allowed to participate in professional discussion' (a quote from the CDGK response to the Institute of Architects, Pakistan, on the subject of the elevated expressway).

PRESS REPORTS

At the end of last month, the press reported extensively on the signing of an implementation agreement for a US \$ 160 million 'landmark project being set up at Port Qasim, Karachi, that will allow natural gas imports into Pakistan for the first time in the country's history' (*Dawn*, Karachi, 29 April 2007, available at www.dawn.com/2007/04/29/ebr2.htm). The 'project' comprises a floating liquefied natural gas (LNG) re-gasification terminal being set up by Exceletrate Energy of Texas, USA, for Pakistan Gasport Limited, a local company whose principal sponsor is the Associated Group, the largest single producer of LPG in Pakistan.

The 'project' envisions the berthing of a re-gasification vessel which will be charged through smaller LNG carriers coming up the Korangi Creek, past residential localities, fishing villages and other port traffic. The re-gasification process will convert the liquid gas to high-pressure gas on board the ship and deliver it directly into the Sui Southern Gas Company Limited network. Such a process has numerous environmental downsides, and is fraught with the hazard of an LNG leak forming a vapour cloud which could explode and the explosion and fire could destroy habitations and structures many miles away (see 'LNG Vapour Cloud Danger to our Communities' at <http://www.timrileylaw.com> to verify the perils).

It may be of interest to the citizens of Karachi to know that the California Coastal Commission unanimously rejected a proposed US\$ 800 million Cabrillo Port 72-million gallon floating LNG terminal approximately 14 miles off the coast of Malibu. The final environmental impact statement for the project acknowledges that it will cause significant impact to air and water quality, public safety, marine wildlife, views, recreation, noise and agriculture—impacts that cannot be mitigated or avoided. Residents of coastal California have been lobbying for months against the venture.

The citizens of Boston are fighting to end the dangerous passage (commercial traffic, roads and bridges are closed during this time) of LNG tankers into Boston's inner harbour. These LNG tankers have been termed 'floating bombs' vulnerable to terrorist action. Excelerate Energy is now constructing a deepwater port, 12 miles outside Cape Ann in Massachusetts (outside US territorial waters).

Why can't our gas port be built far away from human habitation? A Japanese-type environmental impact assessment needs to be conducted for the entire project.

It should be clear that many of the tensions and conflicts that exist in Pakistan are related to environmental problems generated by 'islands of prosperity' in 'oceans of poverty', to quote from an address made by President General Pervez Musharraf in February this year.

As is being increasingly perceived around the world, especially in the European Union, climate change, brought about by destruction of the environment and progressive decimation of living species, is no longer merely an economic or environmental issue. Margaret Beckett, the first woman foreign secretary of the UK, recently stated:

Anyone wanting to trace the links between what science is telling us about physical impacts and the broader ramifications for our security would do well to read a startling report that appeared last Monday. The Military Advisory Board is a group of the most respected retired Admirals and Generals in the United States... They are about as far as you can get from the old stereotype of a tree-hugging environmentalist. And yet in that report they state, categorically, that projected climate change poses a serious threat to America's national security. It is, they say: 'a threat multiplier for instability in some of the most volatile regions of the world.' In other words, an unstable climate will make the very kinds of tensions and conflicts that the Security Council deals with, day in day out, yet more frequent and even more severe.

Now, who, repeat who, amongst what is erroneously known as the ruling elite is capable of heeding all that we read and know? Regrettably all are selfish and all adhere to their individual one-point agendas.



Wild Panther in Miramar? Goa on the Verge of Environmental Hara-kiri

Nandkumar Kamat

INTRODUCTION

'A wild panther (*Panthera pardus*) was trapped from a private residence in Panaji's high class Miramar ward in April 2006'

Miramar-Panaji/Panjim, is on the banks of Mandovi estuary. It is a densely populated area. How did the panther reach there? Where did it come from? Is the island of Tiswadi losing its residual green cover?. The capital city of India's smallest state, Goa, Panjim or Panaji, the 51st richest town in India by bank deposits, has been animatedly discussing this issue. It is indeed a surrealistic experience. Goa is on the verge of a serious environmental crisis. The signs are there on the horizon—destruction of the rich watersheds, pollution of traditional ponds and lakes, deforestation, removal of urban tree cover, cutting of the lush green hills, reclamation of the eco-fragile flood plains of the major estuaries, destruction of the low lying Khazan ecosystem, levelling of the coastal sand dunes, fragmentation of the natural habitats, interference in the natural migratory corridors of the wild animals, overuse of chemical fertilisers, air pollution, dust pollution, impact of mining and quarrying, alluvial sand excavation, plastic waste, mountains of municipal solid waste, human-wild animal (elephants, monkeys, panthers) conflicts, erosion of wild and agrobiodiversity, gene pools and the most dangerous of all—the ecological and cultural simplification.

AN ECOLOGICAL HISTORIAN'S APPROACH

Goa has changed radically in the 20th century. Four major environmental drivers—mining (post-1945), urbanisation (post-1961), industrialisation

(post-1971) and tourism (post-1972) have strongly impacted its ecology and economy in the past 60 years. Understanding the transformation of the ecology and environment of Goa needs an approach of an ecological historian. In this chapter the focus is mostly on the developments of the post-Second World War period (1945–2005).

GEO-ECOLOGICAL SETTING OF GOA

Goa is a small state by area and population, but it is a beautiful state. Because it is small and beautiful, it is a good model for studying ecological and environmental history. The starting point of Goa's history is the genesis of the dot called Goa on the drifting continents. This dot has travelled in time from the south of equator to its present position (N 14° 48' to N 15° 48' Latitude, and E 75° 40' to E 74° 20' Longitude), mid-way along the west coast of India. Geomorphologically greenschist supracrustals overlie a basement trondhjemitic (peninsular) gneiss and are intruded by granites, dolerites and gabbros. The late Cretaceous Deccan traps lie to the Northeast of the state. Laterite covers most formations in this wet tropical climate. Another geologically unique feature of Goa is that it has the ancient crust of earth in the form of the 3.6 billion years-old basement rock—the trondhjeimitic gneiss. This can be compared to the age of the oldest rocks on earth found in Greenland, dated 3.9 billion years. The oldest rocks in Goa were formed before life began on earth, some 3.5 billion years ago. The antiquity of Goa's geological heritage is also found in some of the oldest rocks, such as the Dudhsagar granite, which has been dated at 2565+95 Ma., the Chandranath granite dated at 2650+100 Ma. and the 2395+390 Ma. Canacona porphyritic granite.¹ All these rocks are time capsules of earth's lithospheric history. They were the part of pangaea supercontinent and later the Gondwanaland. From late Jurassic, 150 million years ago, till the split of Gondwanaland 84 million years ago, the rocks probably shared their boundaries with Madagascar and Seychelles plates. So, Goa shares a petrological brotherhood with Madagascar and Seychelles. The Indian plate drifted northward for 100 million years before it had a soft collision with the Eurasian plate during middle Eocene, about 50 million years ago.

During the course of continued northward drift, around 69–65 Mya (Late cretaceous), widespread volcanism took place over the Indian landmass and created the deccan trap continental flood basalt province. It is interesting that the flood basalt did not cover Goa. If that were to happen then perhaps the history of Goa would have taken a different turn.

Gokul, 1985 has observed that during upper cretaceous–Lower Eocene period, the area to the south of the present position of deccan trap in Goa should have been a prominent topographic high which restricted the spread of trap flows to the south. Goa’s ecological history is influenced by the Western Ghats and the Arabian sea.²

A general mistake which most of the environmental scholars commit is to view the landmass of Goa as an isolated area. Goa is part of the central portion of India’s Western Ghats. Historical geography shows that the boundaries of Goa have changed several times. Today the state of Goa is confined to an area of 3,702 sq. km and occupies a 100-km long and 40-km wide strip (in the widest area) between the Western Ghats and the Arabian Sea. The present landscape of Goa is the outcome of complex natural processes. The genesis of the Goan land mass and the rock strata, the rivers, their basins and their channels are intimately related to two important events—the birth of the western Indian ocean and the rise of the Western Ghats. The geological history tells us about the origin of the land, landscape, rock strata, minerals. Goa forms part of the Indian Precambrian shield. In this region greenschist supracrustals overlie a basement trondhjemitic (peninsular) gneiss and are intruded by granites, dolerites and gabbros. The late Cretaceous Deccan traps lie to the north east of the state. Laterite covers most formations in this wet tropical climate. The history of the climate shows us the changing profile of the atmosphere and how it impacts the land. The biotic history sketches the history of living species (Table 29.1 includes the statistics on the explored Biodiversity of Goa). The anthropological history tells us about the origin of the first humans and further developments.

Table 29.1: Explored biodiversity of Goa

Taxa	Catalogued No
FLORA	
I. Microbes	
a. Viruses	30
b. Yeasts	250
c. Bacteria	150
d. Actinomycetes	25
e. Fungi	
- Terrestrial	400+
- Aquatic	80
- Marine	78

(Table 29.1 Contd.)

(Table 29.1 Contd.)

Taxa	Catalogued No
II. Algae	
- Terrestrial	15
- Fresh water	156
- Marine	50
III. Bryophytes	15
IV. Pteridophytes	48
V. Angiosperms	1,750
VI. Gymnosperms	1
FAUNA	
I. Invertebrata	
- Protozoa	NA
- Porifera	NA
- Coelenterata	NA
- Platyhelminthes	NA
- Aschelminthes	NA
- Nematoda	10
- Annelida	NA
- Arthropoda	112
- Arachnida	30
- Crustacea	82
- Mollusca	
Bivalvia	28
Gastropoda	63
Cephalopoda	02
- Echinodermata	NA
II. Protochordata	
- Hermichordata	NA
III. Vertebrata or Chordata	
- Pisces	205
- Reptilia	49
- Aves	357
- Mammalia	45

Note: NA - Not Available

THE REGIONAL DISPARITIES WITHIN GOA

Goa means many things to many people. But there are intraregional variations within Goa. The colonial influence is marginal in the 'new



conquest areas' which are also resource rich. The environmental and developmental problems are different in these talukas. Comparatively the 'old conquest talukas' show a more cohesive culture, high degree of urbanisation, industrialisation and development. The environmental problems of these talukas are different. Then there are ecologically determined cultural factors which separate the settlements and people in the Mahadayi/Mandovi river basin from Zuari river basin. For example the cult of the worship of 'Gajalaxmi' or the goddess of monsoon and vegetation popular in Mandovi river basin is not found in Zuari river basin. The system of alluvial river silt-based rice farming, locally known as 'Puran xeti' is also dominant in the Mandovi river basin. The coastal low lying saline lands known as 'Khazans' are confined to the estuarine belt whereas the terraced plantations known as 'moles' and 'kamats' are located only on the hillslopes in the midland talukas and in the Western Ghat foothills. The rainfall intensity varies from west to east. The Sahyadrian Goa is rich in hydrological and biotic resources. There is also a vertical geographical divide. The coastal plains and the estuarine floodplains are separated by the Sahyadrian hills and foothills. For any student of Goa's environment, the baseline begins with a good understanding of the natural resources and the cultural ecology.

Goans can be called 'ecosystem people' if we use the definition provided by Gadgil and Guha, 1992.³ The best reflection of cultural behaviour of the ecosystem people is found in the Goan folklore. Right from the pre-historic period there seems to be a good understanding of the wild flora and fauna among the inhabitants of the Mandovi and Zuari river basins which drain more than 70 per cent of the state's geographical area. The zoomorphic petroglyphs of Panasaimol, Kazur and Mauxi show the wildlife knowledge of the pre-historic hunters. It is difficult to identify a distinctly Goan set of environmental ethics but the tradition of worshipping sacred groves and sacred trees proves that ecotheologically and ecospiritually the people were quiet advanced.

The environmental issues in Goa

The colonial years: There is clear difference in the environmental issues in colonial and post-colonial Goa. In the colonial period under consideration, the economy was based on the primary sector. The manufacturing sector was marginal and the contribution from the service sector was negligible. Low population pressure, low purchasing power, low consumption meant less pollution.

The only source of air pollution was from the burning of the fuelwood and agricultural residue. Industrial wastewater pollution was negligible. The age of large-scale use of agrochemicals had not dawned as most of the agriculture was organic. So there was no overloading of the lentic and lotic waterbodies with nitrogen and phosphorus leading to eutrophication.

However, clean treated water was scarce and the waterborne diseases were dominant. Preventive health surveillance was excellent and the administration could rapidly identify the sources of various epidemics. Urban sanitation was effective. There were checks on quality of food sold in markets. The community assets were being managed by the *comunidades* (an association of some villagers who controlled land resources). The landlords also managed the community assets such as *bundhs*, drainage works, wells under their possession. But they had limited interest in new capital investment in the lands leased to tenants or occupied by the *mundkars*. There were traditional systems like the 'bhous' which looked after the maintenance of the Khazan lands on a cooperative basis.

A major environmental issue in colonial Goa was the damage to the coastal Khazan lands due to breaches in the protective embankments. There were problems with coastal management due to erosion of the sea shores. But sincere efforts were made in the 1950s to address these issues. There were stringent penalties for intentional flooding of the fertile paddy fields for the purpose of pisciculture. Complaints against the mining industry were restricted to the movement of the barges which caused erosion of the external embankments of the Khazan *bundhs* near Mapusa, Naroa and Mandovi rivers.

This problem became acute in 1955–56. For the coastal Khazan farmers this was the first exposure to the environmental impacts of a new industry. There is no data available about the deforestation caused by the opening of the private mining leases during this period (1946–1961) and the consequent rise in the sediment flow in Mandovi and Zuari rivers. But a rough estimate could be made from the volume of the Iron ore exported—from 60 thousand tones in 1946 to six million metric tones in 1961.

A hundred-fold rise in the ore export meant removal of an overburden by two hundred times. Most of the 'massive dead ore reject dumps' which are seen in the mining belt between Advalpale–Bicholim to Sanguem have their foundation in this period.

The Portuguese administration did not take any steps to impose any environmental guidelines for sustainable mining. But they had made it mandatory to seek the permission of the *Mamlatdar* and the *Captain of*

ports to remove sand or any part of the earth. Their policy of granting of the mining leases to all and sundry created a mini ‘iron ore prospecting’ rush in Goa. The primary sector of Goa paid a heavy price for this policy. There was no understanding of the externalities associated with unregulated mining activity.

The post-colonial years

The post-colonial years are significant on account of the impact of four major environmental drivers—mining, urbanisation, industrialisation and tourism. All these drivers converge on a single focus—‘human interference in the ecosystems’. Table 29.2 outlines the threat perception for different ecosystems. The ecological and environmental impacts of mining became apparent only after 1970s. For a detailed chronological treatment of these issues, readers may refer to Chapter 8 in Claude Alvares’ *Fish Curry and Rice: A Sourcebook on Goa, Its ecology and Life-style*.⁴

Table 29.2: Threats perception—ecosystems and biodiversity of Goa

Type of Ecosystem	Existing and Perceived Threats
Continental Shelf	Supertanker traffic, oil pollution, bilge washings, overfishing, depleting fisheries stocks, agricultural run-off, red-tides. Sediment plume with heavy metal oxides, clay colloids, sewage
Beaches and sand dunes (4000 hectares)	Mass tourism, water sports, constructions, sand removal, solid waste, sewage discharges, dumping of constructional debris, exotic weeds, land levelling
Intertidal rock pools (Vagator, Anjuna, Palolem, Verem)	Oil pollution, solid waste, sewage
Estuarine islands (Tiswadi, Divar, Chorao, Jua, Cumbarjua, Corjuve, Capao, Rane’s Jua, Saint Jacinto)	Breaches in embankments, flooding, exotic weeds, dumping of waste, cutting of mangroves, destruction of watersheds
Marine islands (St. George, grande, pequeno)	Cutting of trees, fires, solid waste
Mangroves (2000 hectares, 9 tidal rivers)	Oil pollution, dumping of plastic waste, constructional debris, fire, deforestation and land reclamation, exotic weeds

Type of Ecosystem	Existing and Perceived Threats
Khazans (saline coastal paddy fields spread in 8 talukas over 17,000 hectares)	Damage to bundhs, sluice gates, flooding, illegal pisciculture, soil erosion, land filling and reclamation, solid waste dumping, scrapyards
Riverbanks and floodplains (about 5000 hectares)	Encroachments, blast fisheries, solid waste and sewage disposal, oil pollution
Lateritic grasslands (plateaus)	Deforestation, housing, industries, fires, exotic weeds
Forests (1250 sq. kms.)	Deforestation, mining, quarrying, dams, roads, kumeri cultivation, monoculture plantations, artificial breaks, exotic weeds, fires, floods, soil erosion, poaching
Myristica swamps in western ghats	Human interference, solid waste, fire
Lotic freshwater (rivers)	Alluvial sand mining, Sediment from mining rejects, high turbidity, oil, grease, heavy metals, nitrates, sewage, solid waste, blast fisheries
Lotic freshwater (springs, fountains)	Watershed destruction, housing, industries, Washing of vehicles, sewage
Lentic freshwater (natural lakes)	Eutrophication, reclamation, encroachments, impact of religious practices (immersion of idols)
Caves (limestone, lateritic)	Mining, slope instabilities, solid waste
Salt pans (agors)	Oil, PHC, heavy metals, sediments, solid waste, flooding, erosion
Wind blown cliffs	Deforestation, quarrying, constructions
Waterfalls	Quarrying, deforestation

<http://www.goacom.com/goafoundation/biodiversity/>

The present environmental discourse regarding mining shows that perceptions differ sharply between various stakeholders. Whereas villagers in Sattari and Sanguem are vehemently opposed to the opening of new mining leases, in areas declared as sanctuaries some people view mining as an economically beneficial activity. The mining labour unions have also adopted an ambivalent stance towards the problems faced by the agricultural proletariat.

The big players in mining have improved their environmental record and have also obtained the ISO certification for environmentally sound mining practices. Generally the debate and the controversies have

centred around issues like deforestation and loss of wildlife, habitat fragmentation, air and noise pollution, the high levels of dust in the environment, the location of the reject ore dumps, the sediment flow polluting the waterbodies, the depletion of local groundwater table, the hazards created by ore transportation and the erosion of infrastructure like the roads. There seems to be an economic trade-off to compensate for the environmental deterioration. People may not be worried about the long-term effects of the pollution if they get generous financial support to build a religious structure or a community hall.

The labour shift has also resulted in abandoning of the fields and the mining area has seen a boom in the service sector. People are caught on the horns of dilemma—they would lose the economic affluence and direct and indirect employment if environmental issues are fought aggressively and apolitically. And if they only focus on improving the environmental quality, there is fear of division in their ranks and closure of the mines.

The panchayati raj system under India's 73rd Constitutional Amendment has been empowered to tackle such issues through the medium of 'Gramsabha'—the general council of the villagers. But the village panchayats in the mining belt have consistently failed to take up the issue of 'environmentally friendly sustainable mining' within their jurisdiction. The village panchayats are empowered to convene multistakeholder meetings to address all the issues related to environment and development. But seldom have these powers been invoked. Either there is political interference or implied threats from the state apparatus.

Mining has been generating more than Rs 1,000 crore-foreign exchange earnings on average per annum, besides contributing a social capital of Rs 250 crore per year. About 15,000 people are directly employed. Another 30,000 are employed in ancillary activities. Thus, 45,000 people in mining industry make it one of the largest labour lobby in the state of Goa. The Government of India has done very little to help the state of Goa to restore the degraded mining areas where mining activity has stopped.

Union government agencies like the Indian bureau of Mines show scant interest in enforcing their mandate for sustainable mining. The main importers of Goa's iron ore are Japan, People's republic of China and South Korea. Even these countries have not demanded environmentally acceptable mining operations. Japan is a big donor for environmental projects. Most of the Japanese aid for eco-restoration projects in Asia and India, through bilateral or multilateral channels has been diverted to other areas. Despite Japan being the oldest importer country of Goa's iron ore, it has not shown any interest in helping Goa for eco-rehabilitation projects

in the mining areas. The Goan iron ore exporters have set up their own foundation which carries the task of implementing some welfare projects in the mining areas.

The Saleli Revolt—How Neglected Social, Ecological Issues Precipitate a Crisis

So far, the discourse against mining in Goa has been limited to the impacts of iron ore mining companies. But large-scale and often illegal stone quarrying for basalt and laterite is leaving ugly ecological and environmental footprints.

The agitation by the ryots of Saleli village in Sattari, north Goa district against the highly polluting stone crushers in 2005 initially did not move the authorities. The Goa State Pollution Control Board gives the consent to operate the stone crushers. The local village panchayats are supposed to give the No Objection Certificate after verifying the site and the possibility of public nuisance from such activity.

In December 2005, a private stone quarry operator in Saleli village was brutally lynched by a mob. There was apparently opposition to his new stone crusher. But there was also another dimension behind the violence—the unresolved land ownership issue. The ryots who rebelled were not entitled to the ownership of the lands which they had been cultivating. There was already a degree of frustration and helplessness among the people as they continued to witness the expansion of the basalt quarrying business. Their sacred hills were taken over. The watershed was bulldozed and the pristine springs vanished. Ultimately when the quarries reached the ‘Devarais’ (sacred groves), the villagers decided that they had too much. What followed after the Saleli homicide was an eye opening lesson for the whole state of Goa. It was a paradigm shift. No more environmental issue would be now studied in isolation. ‘Saleli’ could happen again—that’s what people talk as if Saleli is a symbol of some malady.

The Shelvona dumping yard issue

High grade iron ore brought from Karnataka for the beneficiation of the Goan iron ore has created the problem of heavy dust pollution at Sanvordem dumping yard. The government looked for alternatives. A site at Shelvona on the banks of Zuari river is proposed to be acquired but the



issue has raised dust as there are powerful political role players supporting and opposing the Shelvona project.

This issue appears as another flashpoint indicating how the mining is impacting the grass roots level politics in Goa. There is certainly no unanimity among the mining companies about the selection of the Shelvona site. As they are divided the politicians and the media is also towing different lines according to their loyalties. In the very near future, this issue would emerge as a test case for the mining industry, the local people and the Government.

Towards sustainable mining

The main problem of open cast iron ore mining in Goa is the huge amount of overburden. For every metric tone of iron ore two metric tones of overburden has to be removed. This has resulted in accumulation of more than a billion tones of overburden which is piled up in 'dead' and 'active' dumps. Actually this overburden has good amount of iron (less than 55 but very rarely below 40) and aluminium. But at the present level of technologies.

It is not exploitable. New technologies like bioleaching and biohydro-metallurgy may take a few years to break even. Alternatives for the use of the ore reject which has some clay have been suggested. Excellent adobe bricks could be manufactured from the ore-reject using some binders. Economic and engineering models have been worked out by a Goan engineer, Mr Fernandes, but somehow this idea has not caught up. Besides, at the Goa University, this author has also been experimenting with novel techniques such as biomining and bioleaching to solubilise the metallic ores, so that the low grade ores could be utilised.

These experiments are however at a preliminary stage and need further research.

The main issues in discourse on mining and environment

There are diverse opinions and lobbies which debate these type of issues. Here, the expression 'people' refer to the inhabitants of the mining area of Goa, in a belt spread over 600 square kilometres, from Advalpale to Neturlim, running parallel to the Western Ghats.

- Farmers are opposed to mining but would be satisfied with compensation.

- Farmers are not satisfied with compensation, but need their area to be free from mining or ecologically restored.
- Workers are opposed to the closure of mines or lay-offs and have no public stand on environmental hazards from mining.
- Truck operators are opposed to closure of mines and are insensitive to the dust pollution.
- People are opposed to open transport of the ore which causes massive dust pollution.
- Farmers oppose mining but often are contented to forego cultivation if a mining company offers a good compensation in lieu of the discontinuation of the farming operations or the damage caused.
- People in the wildlife sanctuaries are divided over mining. Those who have good plantations or farms are opposed to mining and those who are unemployed or landless are in favour. Those who hope to borrow loans from the banks to operate ore carrying goods trucks also see new mines as a windfall opportunity. There is a vertical divide between the ecological stakeholders and the economic stakeholders.
- People expect the mine owners to be generous for their social, cultural, religious and educational needs and may ignore the environmental hazards if these needs are met.
- People view media owned by the mine owners as partial towards mining and less sensitive towards environmental concerns.
- People expect media owned by other non-mining interests to take up their grievances.
- The mine owners are concerned about the extortionists and opportunist elements and the troublemakers who may instigate the locals over environmental issues.
- The mine owners and the mining companies claim that they have made substantial investments in social capital formation, by way of charity and by contributing to the growth and development of the educational, cultural and sports sectors.
- The labour unions view the mining vs environment, mining vs agriculture controversies with calculated indifference and have no clear defined policy to stand with the affected people. In very rare cases the interests of the mining workers and farmers have come together.
- People in mining area expect judicial activism over environmental concerns of mining and are prepared to approach the judiciary for intervention.



- Environmental issues related to mining have no priority during any elections as compared to people's needs of roads, bus stands, playgrounds, water, power supply, employment, etc. The environmental issues associated with urbanisation: Rapid urbanisation is another issue which has generated a lot of controversy in Goa because of the large-scale land conversions, lack of urban amenities like sewage disposal systems, slums, health problems, pollution, congestion, traffic bottlenecks, etc.
- In 1950 Goa had only 13 per cent urban population. There was a marginal rise in 1960. But in 1971 the urban population showed a quantum jump from 14.80 per cent to 25.56 per cent. Again in 1981 it went up to 32.03 per cent, followed by 41.01 per cent in 1991 and 49.77 per cent in 2001. The latest estimate shows the urban population reached 54 per cent by March 2005. The 2002 National census put Goa at the top of the list of highly urbanised states. Among the 11 talukas of Goa, Salcete, Bardez, Marmgoa and Tiswadi show a very high trend of urbanisation. Incidentally, these four talukas are also highly globalised. Most of the wealth of Goa is also accumulated in these four talukas.

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SECTION EIGHT
Gender and Environment



Reporting Gender and Environment: Beyond Tokenism

Laxmi Murthy

In the present climate of political correctness, an awkward three-letter concoction, s/he, often passes for addressing the 'gender element'. Tacking on a 'her', 'women' and 'girls', to a narrative that is essentially male-focused, however, does not do away with the 'issue' of gender.

The past two decades have also witnessed 'gender mainstreaming', an official policy on equal opportunity that entails the incorporation of equal opportunities for women and men in all policies and structures. This political strategy aimed at achieving gender equity is seemingly more broad-based than policies aimed at achieving equal opportunities for women. Yet, gender mainstreaming is a top-down strategy with a target group of decision makers, as opposed to women's rights campaigns which are most often grassroots movements.

Similarly, talk of 'gender equity', the advocacy of equality, or a belief in basic equal rights and opportunities for all genders within legal, political, social, or corporate establishments, makes the erroneous assumptions that women's rights have already been achieved. In all societies where there is a historical, traditional and sometimes legal bias against the exercise of rights by women, gender equity and gender mainstreaming are not possible without achieving women's rights, because women in general continue to suffer structural disadvantage.

Conversely, even as women continue to bear the brunt of systematic, institutionalised discrimination, movements for change as well as mainstream discourse that has incorporated a gender critique have ensured great visibility for women. It seems as though women are everywhere. Indeed, gender seems to have been taken on board with a vengeance, sometimes to the extent of becoming a fetish. Part of the problem could be traced to



the particular place women have begun to occupy in any discussion on the environment. The media could not but reflect this trend.

WOMEN AND NATURE

Environmentalism giving way to ecofeminism in the West in the 1980s was a corollary of the feminist movement itself. Increasingly, the exploitative relationship between nature and human beings began to be viewed through the lens of patriarchal domination. Critiques of patriarchal science, the dominant model of development, with its focus on extraction of natural resources emerged.¹ The gender-based division of labour and its impact on nature also came in for study. Indeed, it was implied that women were intrinsically closer to nature and it was 'natural' that they shouldered more responsibility to protect Mother Earth from plunder. Movements like the Chipko Andolan (movement to prevent deforestation led by village women in Garhwal) in the 1970s and Greenham Common (the eponymous women-led protest against nuclear weapons in the early 1980s in England), exemplified and defied this link.

Soon, the proposition that women had an inextricable link with nature was reinforced by international agencies and NGOs, although the rhetoric was based more on gender roles rather than biology. For example, the World Bank holds, 'Women ... play an essential role in the management of natural resources, including soil, water, forests and energy ... and often have a profound traditional and contemporary knowledge of the natural world around them.'² However, this trend of essentialising women, reinforcing their supposed 'intrinsic' bond with nature has had the effect of laying the burden of dealing with environmental degradation squarely on women's shoulders.

Moreover, the media has also tended to suspend a healthy criticality when it comes to the sacred cows of development, one of which has been micro-credit and self-help groups. Probing beneath the surface often yields the real story. The reality that only a tiny percentage of women own land (75 per cent of women-headed households own less than 0.40 hectares, according to NSS data), increases their vulnerability particularly in situations of disasters. Nitya Rao³ demonstrates the variance in recovery due to land ownership in the recent experiences after the Indian Ocean Tsunami. Studies show that the fishermen community—that is, men—received replacements of their damaged boats and fishing nets running into thousands of rupees. In contrast fisherwomen dependent on selling fish were not compensated for their loss of livelihoods. When International

and Local NGOs intervened they used the mechanism of the self-help groups. This has often resulted in women receiving loans to ensure short-term sustainability with little surety of economic recovery. The loans given through the self-help groups have to be repaid whereas the men in most cases were given grants or at least subsidies. Such disparities have been rarely highlighted by the media, which tends to take 'success' stories at face value.

Indeed, in the guise of 'success' stories and stories of change, highlighting the heroic efforts of individual women or groups of women, to deal with the ravaged environment that directly impacts their lives, the media has been responsible for reinforcing the notion that it is women who must not only lead, but be the movement themselves. This begs the question—does this let men off the hook? In order to parse this question, we must go back to some of the basics of journalism.

GENDERED LENS

Much before men and women choose journalism as a career, they are socialised in male and female roles, which are specific to a particular culture. This socialisation influences how the individual journalist, as well as the media as a whole reports on, portrays and treats women. Gender sensitisation helps journalists to identify and understand the attitudes, prejudices, biases and socialisation which often come through in media messages; to recognise and analyse the imbalanced portrayal of women in the media and the marginalisation of women's voices; and also provides skills and techniques to journalists and editors to analyse facts, issues and data from a gender perspective.

Some key factors in sensitising journalists to include the gender perspective has been to ask whether the coverage reflects a holistic view that includes women, and also to pause to think whether gender awareness and sensitivity are built into reporting requirements. Whether or not coverage has given equal space to men's and women's voices, and whether the gender dimension of the story has been explored are by now accepted basics of gender-sensitive reporting. Avoiding reinforcing gender stereotypes, trivialising women's experiences on the one hand or sensationalising them on the other, is another basic tenet. This would be particularly relevant in the use of visuals, both still and broadcast, reinforcing the stereotype of women as victims, particularly during natural calamities, for example. At the same time, while guarding against making women 'invisible', over-representation is a potential hazard.



Using inclusive, gender neutral language but also making sure to specify gender disaggregated data where relevant, is also considered routine in order to weave gender balance and accuracy.

Gender neutral language matters a great deal. Traditionally, in most societies, men have been the dominant force and our language has developed in ways which reflect male dominance, sometimes to the total exclusion of women. Studies⁴ have shown that the use of the word 'man' ('social man', 'industrial man', and 'political man') evoke, to a statistically significant degree, images of males only—filtering out recognition of women's participation in these major areas of life—whereas the corresponding headings without 'man' evoked images of both males and females.

Gender-neutral language (gender-generic, gender-inclusive, non-sexist, or sex-neutral language) is language that attempts to refer neither to males or females when the sex of the person is irrelevant to the subject. In English-language journalism, gender-neutral language includes the use of gender-neutral pronouns, as well as specific words that reinforce stereotypes of gender roles. Again, in the rush to be gender sensitive and inclusive, the journalist must guard against the over-use of 'she' and 'her', and specifically be cautious when it comes to referring to victims.

Language in any society is dynamic, and the media must not keep up with the changes, but be the fore-runner of coining new language that reflects changing social hierarchies and rigid divisions. Not only will this reach out to a wider audience, it can perform the crucial role of affecting social consciousness in the long run.

BEYOND TOKENISM—GETTING AT THE TRUTH

So when journalists are increasingly being trained to include the gender element in their stories covering environment, using gender-neutral language and being sensitive to the use of visuals and women's voices, where is the problem?

In the first place, this is simply not being done enough, as several analysts have pointed out, and there is a long way to go before environmental reporting is truly inclusive of gender concerns.⁵ Second, as detailed above, such an approach, in the name of recognising the crucial link between women and environment, places the entire burden of environmental activism on women. Third, token gender sensitivity tends to miss the more complex stories.

This can be best illustrated through an example of a story that is literally in the air we breathe: the connection between environmental pollution and women's well-being; between chemical corporations and reproductive health.

THE DIOXIN STORY

Dioxin and furans, some of the most toxic chemicals known to humankind, are literally all around us. Dioxins, classified by the World Health Organisation as carcinogenic, are a chemical family with about 75 members, the most toxic of which is 2,3,7,8-Tetra-Chloro-Dibenzo-p-Dioxin (TCDD). Synthesised as a by-product of the chlorine industry, dioxins are also released into the atmosphere by incineration of chlorine-based products such as plastics, paints, etc. They take centuries to degrade, and can undergo continual recycling in the environment.

Dioxin, also called an 'environmental hormone', is an endocrine disruptor, that is, it interferes with the normal functioning of the endocrine system—cells and glands in the body that secrete hormones, the chemical messengers that regulate bodily processes. Experimental evidence shows that elevated levels of the female hormone estrogen can promote breast cell proliferation which can lead to breast cancer. Environmental estrogens or 'xenoestrogens' like dioxin may increase breast cancer risk by binding to and acting through estrogen receptors, thereby imitating natural estrogens.

Back in September 1994, the US Environmental Protection Agency (EPA) released a document of human health risks from exposure to dioxin, and warned that dioxin poses a large-scale, long term threat to public health—not only because dioxins are 'likely to present a cancer hazard to humans', but also because they may have adverse effects on development, reproduction and the immune system.

Research in the West has implicated xenoestrogens in higher rates of spontaneous abortion, foetal death and intra-uterine growth retardation, since dioxin is known to block the secretion of the thyroid hormone. In addition to the amount of exposure, the timing seems to be crucial. Exposure during foetal development or during early infancy can have serious implications for future development.

Moreover, pioneering studies on rhesus monkeys in 1993⁶ have shown that exposure to PCBs (polychlorinated biphenyls) and dioxin increase the risk of endometriosis—a disease in which endometrial cells (normally found lining the uterus) proliferate outside the uterus, causing



irregular bleeding, excruciating pain, chronic fatigue and infertility. PCBs and dioxin are known to affect the immune mechanism, which is thought to be involved in endometriosis. Researchers also concluded that human exposure to dioxin is significantly higher than that associated with endometriosis in monkeys and also state that current public health standards are not strong enough to provide guarantees against the potential for dioxin causing endometriosis. What is of concern is that endometriosis, a debilitating disease now affecting an estimated 7–10 per cent of women in their reproductive years, was observed at very low doses of dioxin. In fact, the dose was seven–eight times lower than the ‘no-adverse-effect’ level proposed by the WHO (1,000 pg/kg/day), indicating that this guideline may not be protective of human health. The limit now being proposed is about 0.1 pg/kg of body weight, although many already have levels far above this limit. Another concern is the effect of ‘synergism’, whereby even minute quantities of these chemicals can cause immense harm when acting in combination with other chemicals.

The sources of dioxin are all around us, in alarmingly ‘common’ items of daily use which contain chlorine, for instance, paints, pesticides, detergents, plastics, paper, pharmaceuticals, and PVC. Effluents from factories manufacturing these products pollute water, soil and air, thus entering the food chain in several ways. They are passed on via the natural food chain in constantly higher concentrations. Indeed, scientists believe that organo-chlorines are now present in the body fat of every person on the planet. The treatment of drinking water with chlorine has recently been found to release chlorinated by-products like trihalomethanes, which could be carcinogenic. A long-term move towards source protection would minimise hazardous disinfectant treatment.

Pesticides such as DDT, in use for over 50 years and associated chlorinated pesticides like aldrin, endrin and lindane, remain intact (that is, are not bio-degradable) and have a disastrous tendency to accumulate in fatty tissue. As far back as 1993, a study in Punjab found that 80 per cent of food samples were contaminated by DDT; all 244 examples of milk and its products and all 130 samples of breast milk contained residues of DDT. Though DDT was withdrawn from use in agriculture in 1989, it continues to be used in the public health programme for malaria eradication, since the short-term benefits are prioritised over the long-term risks.

The link between industry and cancer is apparent for those in the media who dig beneath the surface. For instance, in the late 1990s, it became known that Breast Cancer Awareness month in the US which began in

1984 is wholly sponsored by Zeneca Corp, now known as AstraZeneca, a leading pharmaceutical company, makers of tamoxifen, the controversial, yet most widely prescribed breast cancer drug. The focus is on early detection, and there is no mention of prevention. More significantly, there is no talk of the link between environmental and occupational hazards with breast cancer. Zeneca pays for and controls all the radio and TV spots, all the pamphlets, all the information relating to 'Breast Cancer Awareness Month'. There is never any mention that environmental risk factors may induce or promote breast tumours. Ironically, Zeneca earns US\$ 300 million each year from sales of the carcinogenic herbicide acetochlor. Since it also earns about US\$ 500 million each year marketing tamoxifen, cancer prevention is obviously not a priority.

Breast cancer is a major world-wide public health problem, representing between 3–5 per cent of all deaths in developed countries and 1–3 per cent deaths in developing countries. Cancer registries in India have also observed an increase in incidence of breast cancer over the last two decades. Data released by the Indian Council of Medical Research in 2006 shows that the incidence of breast cancer is high among Indian women in the metropolitan cities of Mumbai, Chennai, and Delhi. Although accurate data is not available in India, it is estimated that one in 22 Indian women is likely to develop breast cancer during her lifetime, though the figure is considerably higher in America.⁷ According to a study by International Agency for Research on Cancer (IARC), there will be approximately 2,50,000 new cases of breast cancer in India by 2015. At present, India reports around 1,00,000 new cases annually.⁸

It is now established that due to women's unique physiology, they may respond differently than men to environmental toxin exposure. Many of these toxins are stored in fat and may reside in the body for long periods of time. Storage of toxins in fat is a problem of greater importance in women because of their higher percentage of body fat and the hormonal changes that occur during pregnancy, lactation, and menopause, which can result in mobilising internal stores of pollutants many years after the initial exposure.⁹ Yet, the link between environmental pollution and breast cancer is rarely made in the mainstream media, which focuses more on lifestyle factors.

The story of dioxin is not an environmental story alone—the gender element is crucial to exposing it. As scholar and activist Joni Seager argues:



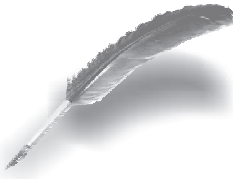
The effects of exposure to pollution cannot be generalized across a population; they will vary considerably with age, class, race, nationality, gender, geographic location and social location. Feminists are particularly active in exploring the ways in which the health impacts of pollution are different for men and for women.¹⁰

While declining sperm counts in men has also been correlated with dioxin in several studies in India and the West, there is no doubt that the most widespread impact is on women's health. The timing, prevalence, and rate of particular cancers (especially breast cancer), reproductive disorders, and chronic health impairments are typically very different in women than in their male counterparts.

The link between women's health, pollution and industry, has not been adequately investigated in the Indian media, or by the medical establishment. It has largely been women's organisations and health activists who have been raising these issues and insisting that women's experiences of pollution be disaggregated from the more typically generalised studies of pollution impacts. What the media must realise, is that gender sensitive journalism is good journalism, and the big story will be missed if half of humanity is ignored.

NOTES

1. Maria Mies, best known for *Patriarchy and Accumulation on a World Scale* (1986) and Vandana Shiva, with *Staying Alive* (1989), best represent this stream of thought. Their 1993 book *Ecofeminism* is a significant dialogue between feminists in the North and South.
2. www.worldbank.org
3. Rao, Nitya (2005) 'Gender Equality, Land Rights and Household Food Security Discussion of Rice Farming Systems', *Economic and Political Weekly*, 18–24 June.
4. For example Wendy Martyna's pioneering 1980 work, 'The Psychology of the Generic Masculine', in McConnell-Ginet, R. Borker and N. Furman (eds), *Women and Language in Literature and Society*. New York: Praeger Publishers.
5. See, for example, Joseph, Ammu (2007) 'The Gender Factor', in Nalini Rajan (ed.), *21st Century Journalism in India*, SAGE Publications, and Joni Seager's 'Noticing Gender (or not) in Disasters', *Chicago Tribune*, 14 Sept 2005.
6. Rier, S., D. Martin, R. Bowman, W. Dmowski and J. Becker (1993) 'Endometriosis in Rhesus Monkeys Following Chronic Exposure to 2,3,7,8-Tetrachlorodibenzo-p-Dioxin', *Fundamental and Applied Toxicology*, 21: 433–441.
7. http://www.medindia.net/news/view_news_main.asp?x=7279
8. <http://sify.com/news/fullstory.php?id=14648743>
9. <http://www.nutrained.com/environment/airpollutionintro.htm>
10. Seager, Joni (1996) 'Rethinking the Environment: Women and Pollution', *Political Environments*, 3 (Spring).



SECTION NINE

Environmental Movements



The Grass is Greener This Side

Meena Menon

The sun was not yet out. Red tiled roofs emerged from the dull grey waters. It was a group of submerged huts, all belonging to one family. Domkhedi village, on the banks of the Narmada River, many years ago, was a rich bustling settlement which wound down steeply to the river. Now the boats touched the last remaining flat ground which had a small hillock on top with a single house. By now, I am sure it has vanished forever.

The landscape of the valley had changed—the deep ravines were gone. The backwaters filled them up to the last remaining crests. The people had left long ago. It was Holi at Domkhedi on the last bit of flat ground. The celebration of good over evil. A slow menacing dance of a beleaguered people, praying perhaps for their lives and their lands which were already taken away from them. It was elemental, the events of the last decade, and as if by some sorcery, an entire valley was swept under water. These waters would never part, there would be no revelations. Only a requiem.

When I woke up groggy eyed to the sound of incessant drumming and a giant bonfire around which men danced—a slow rhythmic movement in circles, I realised that this was the last time I would be seeing this. These people, who moved much like their ancestors around a huge fire, were in reality on a sacrificial altar. They were praying to the five elements. Was there a sense of betrayal? I did not see it though.

Twenty years ago, when I came to the Narmada valley for the first time, it was the seat of the anti-dam struggle. There was much intrigue and expectation. As I heaved up the steep slope from where the boat had stopped, I saw the lush vegetation all around. It was a poor adivasi village—no lights, no school and no health care. But in terms of resources, it was rich. Far away in the city, few cared if Domkhedi lived or drowned. Many would not even know it and even if they did, so what?



And that dance around the fire was for me a dance of death. I thought about all that was written about the dam, displacement and about the people whose lives were in any case 'so pathetic'. It was better they moved out to places where the government gave all the facilities or so the argument went. The argument favoured by those who believed in so called public purpose projects.

The contrast between Domkhedi and our city lives suddenly struck me as ludicrous. It also struck me—were these people praying to the five elements to forgive us for taking away their lives? All night I was haunted by bizarre thoughts as I watched them dance. It had a strange compelling quality. Resentful and placatory, even menacing—all sorts of words came to me trying to describe their dance. It meant so many things, life itself and I realised what it meant to them to lose that land. It was their sorrow being churned out in those rhythmic circles, there was no need for words. It was there for everyone to see. A sort of a last stand under a full moon while the backwaters lapped silently against half hidden huts. It is a night I will never forget.

NO STRANGE BREED, JUST COMMITTED JOURNALISTS

There were many unforgettable moments during the course of being an 'environmental' journalist. The popular perception is that we are some strange breed which wants to preserve nature at any cost. We care little for people and development was a no no for us. And of course, 'we protested against everything'. Since the days of the Mulshi dam before independence and later, the Bhakra Nangal dam people have questioned the need for big dams and the entire model of development that relied on these temples of progress. In Maharashtra too, many stalwarts opposed dams and formed organisations against them. Their struggles were reported widely, and then I don't think it was called environmental journalism. My first exposure to remote areas started with Murbad, near Mumbai, where people were waging a war over land. The struggle for land was such a primary one and to tag it only as an environment movement would be doing it a grave injustice. Later, I met the feisty Kaluram Dhondge of Bhoomi Sena who had led a revolutionary movement for people's rights over forest land in Palghar and surrounding areas of the predominantly adivasi Thane district. Meeting people like Kaluram taught me that environmental journalism was all encompassing, it centred on the fundamentals of human existence, the right over natural resources and a say in development. It was also painfully clear that the land rights movements which took off

in a sporadic way in many parts of the country did not sustain for long and many of the problems we see today can be traced back to that basic issue. With some notable exceptions the issue really has not grabbed the attention of the media and that would count as one of our failures in a sense. As a journalist in the early 1980s, the Narmada movement was a very attractive one to report on and not at all easy. I remember spending a week in the valley in 1988 on the 'Samvad Yatra' led by Medha Patkar. It was an initiation of sorts. We were a group of journalists who staggered along with Medha and her energetic companions, walking all day through villages where she would hold meetings and then crashing at night. It's so easy to get taken in by the romance of it all. The long boat rides on the emerald green and yet dangerous Narmada, the moonlit walks, the variety of people you meet and the immense hospitality of the region, to say nothing of the food. The meetings brought us back to earth and the issues were so many—poor rehabilitation policies, at that time no land for land and a growing opposition to the dam. The seriousness of it all slowly sank in. When you see the lives of the people, their simplicity, especially in the remote adivasi regions, you do feel a twinge. Can't these people get something better? But a thought holds you back. Why must people, always poor at that, move to make way for large projects so that the rest of us can enjoy electricity 24 × 7.

JOURNALISM WITH A CAUSE

Then people say how can we live in darkness? Don't we need power? Certainly we do, I won't be writing this without power, but so do the people who are displaced. The argument is for a more equitable form of development, which does not dump those who are giving up land and their livelihoods. No one denies that irrigation is important but why can't we look at alternatives, options of smaller dams, micro irrigation and other models. Or if you must displace people, at least ensure an efficient rehabilitation package. Where is all that participatory development we had heard about? While the press did its fair share to promote an alternative line of thinking for a while, it all died down. I was often told I romanticised about these things and I wanted to preserve adivasis in their remote forests for posterity. The stereotypes about 'environment' journalism never cease to amaze me, specially from my colleagues.

But I must say that while the movement against the Sardar Sarovar Project (SSP) at least ensured a decent rehabilitation package for those affected, the Indira Sagar dam much bigger than the Sardar Sarovar



Project, left behind a trail of displaced people who were paid money for their land and asked to fend for themselves. While we are a long way from decent rehabilitation for projects, we displace people with great alacrity, as you can see in Bargi and so many other dams. There was little media reporting on Indira Sagar till Harsud was flooded. Harsud, remember, was the place where in 1989 the various people's movements gathered to protest against dams and destructive development.

After Sardar Sarovar, few protests got so much media attention and I think we need to do some introspection on why this was so. In retrospect, the anti Sardar Sarovar Project (SSP) movement though it enjoyed wide media coverage and was inspiring for many, led to few changes in government policy or thinking. The Supreme Court giving the go ahead for the dam dampened the struggle against it.

Some years ago when I visited the rehabilitation sites in Maharashtra I met some of the local activists of the struggle who had moved out. I still remember Kewal Singh during the hey days of the agitation who had sworn to die but not leave his village and here was Kewal Singh in a rehabilitation site. He told me he had no choice but to leave along with the rest of his village. It was either that or face the water. It was life and death and he chose life. It is easy to be infected by the idealism and excitement of a movement and when I saw Kewal Singh, an eager youth so militant once and now so subdued, I understood the reality he was facing, like so many others, who really did not have a choice.

Over the years you do understand people's movements better and can decide if the issues are sustainable in the long run. No choice—that seems to be the motto of people faced with large projects coming up in their area. But the people of Orissa turned that around to stall a few bauxite mining projects. Orissa with its large reserves of bauxite was an attractive option for companies who wanted to create export oriented units there. A little further from Rayagada is Kashipur, the seat of opposition to the Utkal mining project. When I travelled in the area thanks to a fellowship, what really got me mad was the abject poverty and the great roads. Kashipur block hit the headlines many years ago for its deaths due to malnutrition.

After so many deaths the government built roads everywhere, as if that was the main reason why people died. There was huge money sunk into the area after Prime Minister Rajiv Gandhi visited the place in 1987 and yet the people barely had enough to eat. The bauxite companies promised them the moon but the people did not fall in line. They had little land, grew paddy and bare essentials, and even crushed their own oil using

wooden implements. Here were some of the lowest levels of literacy in the country, people had very little to wear and not much work the year round. I met a Punjabi family in Rayagada who said they were hoping the new factories that would come up here would give people jobs. That showed me the disconnect between the protestors and the middle class.

The entire administration was bending backwards to please these companies and the police even fired on the agitators killing three of them at Maikanch. The current struggles against Posco and Tata only magnify the problems at stake. Here was another life and death situation. Post globalisation one has to contend with global companies and the predominance of export, the poor adivasi is only a tool to be moved out. At that time few journalists covered this crucial battle for land but I would think it is an ongoing battle and needs much wider media focus with more emphasis on the issues involving land rights and ownership.

The media's corporate avatar is evident when you have a legislation which mandates that land must be given back to the adivasis. There is a hue and cry from all quarters saying that the forests will be depleted. In fact there is real sluggishness on the part of the government to implement the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006. The same government with great alacrity clears a wind energy project in the forest areas of Dhule, on land on which the rights of forest dwellers have not yet been settled. When the people protest, the leaders of the agitation are externed and there are cases against all the protestors. While the people are not against wind energy, they are certainly against the government allotting land to wind energy majors instead of solving their decades old problem of land ownership.

DEALING WITH THE TRADE-OFFS

According to me that's a classic 21st century conflict which few are reporting on. You often hear praise of wind energy and our installed capacity but few question the reality. Wind energy is a clean and renewable power source no questions on that, but why locate it on forest land, where thousands of trees are cut to make way for the wind towers.

There is another small problem, some of that land could belong to people and because of the delayed implementation of the new law, no one knows for sure. Subdue all protests, extern the leaders. We have come full circle. Under what bracket does this fall into? Where does this become environment and where does this become human rights or land rights—



the lines are increasingly getting blurred and by ignoring such issues it does not mean the lines will fade away. From the 1980s onwards non governmental organisations (NGOs) entered the environment arena in a big way. Kalpavriksh brought out the first critique against the SSP and is still continuing its work on many basic problems facing the country. In many places, it was NGOs which often alerted journalists and helped them with stories and logistics. In Orissa for instance many NGOs supported the people's struggle against the Utkal project but later they were black listed by the government. While travelling in Orissa which has a very large number of NGOs, I often asked them what they thought of the mining protests. Some of them were too insulated to even respond while others said there were more worried about their own issues. This fragmentation of issues and project wise approach, depending on funding, often led to a poor understanding of the larger picture. In fact many of the people spoke about the role of the NGOs and how sometimes they tend to put a dampener on the people's movements. I recently heard that the Madhya Pradesh government had cancelled the leases to the Tawa Matsya Sangh which was running a prosperous cooperative which helped people displaced by the Tawa dam earn their living by fishing in the reservoir. The government did the same thing in Bargi dam some years ago. One of the earliest dams on the Narmada, I visited the Bargi refugees when I was in *The Times of India* in the 1990s. The people were living on small islands in the reservoir as they had nowhere else to go. Some of them still kept the cheques the government had given them in lieu of their land. They did not know what to do with it. We travelled in small 'dungis', little dugouts, where the slightest movement could mean we would end up in the water. It was like travelling on a sea, endless hours with a single boatman struggling with the oars. And sometimes there was no land in sight for miles. The islands were so small that we had to go to another small hillock by boat for our morning ablutions. Yet people lived there. During the agitation to demand better rehabilitation, there was a night watch to warn people against snakes and scorpions. We stayed there overnight and the women told us horror stories of snakes and scorpions entering their houses.

The huts were full of insects which plopped into our food and water. For these people the dam did not mean anything. They lived in darkness, ate food with insects dropping all over them and lived in fear of being bitten by poisonous snakes. Some of them moved to Jabalpur to earn a living carrying petromax lamps during weddings. Their houses were beside a stinky pond and consisted of plastic sheets held together with

ropes. These were once farmers with large holdings, now reduced to begging for a livelihood. Travelling around the country gives you the space to understand different issues at stake. You can go up steep Himalayan slopes, right down to the coast in your quest for stories. And most of the things add up to make a big picture. For instance, I don't know if malnutrition falls in the ambit of environmental journalism but some of the trips, even 100 km from Mumbai, bring the problems of adivasi people to the fore. The community can no longer depend on forests for their livelihood. Their land is rainfed. They grow a bit of coarse cereals for their existence and migrate for work.

It is this migration that brings on the problem of malnutrition for their young children. The unorganised sector has no social structure to care for the young and for the time when the parents migrate to work in brick kilns or cut grass, their children wander neglected. I saw the most horrifying sights in Jawhar in a rural hospital—children with irreversible protein deficiency called kwashiorkor. Swollen bodies with no hope of survival.

Sometimes the irate parents drag them away from hospital as they cannot remain with their children and lose their day's wages. In fact in areas like Melghat in Amravati district, the government started paying Rs 50 a day to parents instead of wages just so that the children are kept in hospital. Melghat once notorious for its malnutrition has better roads now (the eternal panacea) but the health care remains abysmal. No doctor wants to practice there and all the newly built hospitals have few medical persons of any skill. The creation of the tiger reserve had further hampered the community's ability to depend on forests and there is a massive plan to rehouse forest dwellers outside the core area of the park.

The tiger is more important than us humans, is what one adivasi told me. They can't understand what the fuss is all about. In these places there is a direct link between the cutting off of access to forests and depletion of the nutrition, especially in children. The mothers are weak and bloodless and often work till the last day of pregnancy. Once the forest department used to give villagers work but now even that has stopped. By removing communities from the forests, one hopes the tiger can be saved and the dwindling numbers may even justify those steps.

But once communities protected the forest and the animals, the situation has changed from a relationship of co-existence to one of hostility. So you have the high number of tiger deaths with poachers making inroads into the forest with the help of locals. What has brought about this situation? I once had a very romantic idea of forests—inviolable places which one



should preserve for prosperity. No human interference must be tolerated. But over the years my mind has changed after seeing the way forest communities have been alienated and how they are fighting for their lives. The popular stereotype is that forests are being depleted by adivasis. We forget the contractor, government and political mafia that is involved. We need to ask some pertinent questions here and the answers may not be easy to find. Sometimes we do miss the wood for the trees.

One of the most enjoyable projects I worked on was a book on organic cotton. Cotton uses the largest amount of chemicals in the country and the idea was to draw up a list of farmers who were not using chemical fertilisers and pesticides to grow cotton. Initiated through a debate by Deccan Development Society and Kalpavriksh, the idea was to present an alternative to the intensive cropping of cotton. I travelled to four states, meeting farmers and living with them in many cases to get a first hand account of what they were doing. Cotton was an inspiring subject. India is a centre of origin of the crop and we had so many indigenous varieties of cotton before the hybrids were introduced, with American strains. These longer stapled cotton fibres were more suited for the mills in Manchester.

Our cotton, the short stapled variety was more suited for hand weaving. I found farmers managing quite well without pesticides and did amazing experiments on their own to use different kinds of on farm antidotes to pests. They even resisted the use of transgenic cotton which is now being grown all over the place, despite its shortcomings. I also learnt that while the government promotes transgenic crops, it fails to supply good quality seeds to farmers. This brings me to near lack of debate in the media on genetically modified (GM) crops. We don't question enough the priorities of the government which is pushing these crops. Newspapers rarely give information about such crops or foods, so that the consumer can make an informed choice. While reporting on climate change is considered *de rigueur*, the major issue of transgenic crops has somehow evaded us. In fact I am willing to bet there have been more reports praising the transgenic crops than the contrary. I find most of the scientific establishment is dead set against organic farming. Once at a seminar, one of the scientists in Hyderabad was so disparaging about it and he asked me 'You want everything organic, is your telephone also organic?'

When I think of the research on transgenic rice, I recall my visit to the rice bowl of Chhattisgarh which made me familiar with the work

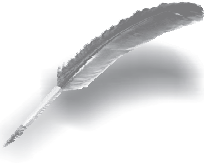
of Dr R.H. Richharia. One of the country's renowned rice scientists, he was removed as director of the Central Rice Research Institute for his opposition to the import of dwarf rice varieties into India. He collected 22,500 accessions of rice at the rice germplasm bank at the Indira Gandhi Agricultural University (IGAU), near Raipur and a majority of them are from Chhattisgarh.

Dr Richharia wanted to develop strong indigenous strains of rice which he was not allowed to do thanks to government interference but his memory is alive in the minds of people who were his followers and those who worked with him.

Travelling in rural Chhattisgarh I met farmers who grew the old traditional varieties of rice which are pest resistant and suited to rainfed areas, and got the same yield as the new hybrid varieties which were water and chemical intensive. India has a rich tradition of rice and mind boggling varieties, yet we don't want to acknowledge that history. I was glad I got to know some part of it through my travels and friends like Jacob Nellithanam, who keenly track these issues. Reporting on agriculture, people's movements against a variety of projects, from coal based thermal power plants, dams, mining projects and ports, led me to believe that our policies are really warped. We did not recognise the inherent qualities we had as a nation, its rich resources, culture and history while planning for the future. We accepted outdated models of development and did not question them despite the overwhelming evidence available. People ask me, why protest against coal power. Well now we know why! Right now, while the industry says coal is the best available option, we need to look beyond that. In areas where coal is used, half the time people are ensuring that pollution control norms are not exceeded. Why is research in our country on renewables so poor?

As journalists we need to ask these questions more forcefully. After seeing the current food crisis in many parts of the world, we must be grateful we still grow food and not biofuels and end up like Mexico, for instance which has had to import corn for its consumption needs. You can't fool all the people all the time. I think that's what has kept us ticking as a country. As a journalist it is important to understand these micro and macro issues. Sometimes it takes a while before you develop a perspective but what's the hurry. When I look back, I think reporting on these issues has left me feeling quite satisfied, it is substantial work and no one is giving you these stories on a plate.

What is important is that all of us persisted without much encouragement. The prospect of climate change and its devastating implications has vindicated 'environment' journalists and journalism to a great extent. Depletion of forests, mangroves, using thermal power, fossil fuel, pesticides and chemicals, soil depletion are all issues that are now in the forefront of global debates. From being sidelined once as 'environment issues', the focus now is broader, on saving planet earth. Well, we were there first.



The Chipko and Appiko Movements

Pandurang Hegde

The Chipko-Appiko (Hug the trees) movement is a classical case in which the grass roots movement to protect the forests and natural resources gets national and international coverage in the media. Unfortunately it is also a classic case of the media playing to the tunes of the whims and fancies of the journalists who have tried to change the course of the movement and in the process have created rifts within the movement by distorted coverage. The history of the Chipko struggle is also the history of how media coverage can have a negative impact on the movements. The launching of the movement by the hill women in the remote Himalayan village was first covered by the Hindi press. It was Anupam Mishra, a freelance journalist who reported the historic event. This was followed up by the English media. Anil Agarwal, then a reporter for the national daily in Delhi took up the issue and wrote on the development of the movement. Similarly another freelance journalist Bharat Dogra wrote articles both in Hindi and English media. The coverage in the English media attracted international attention. The European and the Scandinavian countries covered the movement extensively and hailed it as a major contribution to the international ecological movement worldwide. This international coverage did have a positive impact in creating goodwill for the movement raising its status in various continents as people wanted to know more about the ways in which the village women followed the Gandhian tradition of non-violence in protection of the natural resources, especially the forests in fragile Himalayan eco system.

Chipko, being the first of its kind of environment movement in India has attracted wide media coverage in the English and vernacular press. One of its spokesmen Sunderlal Bahuguna was a freelance journalist and he contributed articles in Hindi and English. The coverage by the regional media has been a major cause for spread of the movement in regions like



Bastar (Chhattisgarh), Rajasthan, Himachal Pradesh, Karnataka, Kerala and Orissa.

Though Chipko was essentially a women movement launched and sustained by hill women, the media projected it as a movement of leaders like Sunderlal Bahuguna and Chandi Prasad Bhatt. Eventually it was the negative impact of the media which created a rift within the movement leading to two different strains of Chipko! Thus the media was trying to follow the divide and rule principle in order to support one or the other strains of the movement. It was this negative role of the media which pitted one against another claiming that theirs was the genuine Chipko! In this process the media ignored the real supporters—the Chipko women from the remote hill villages. Instead, the media persons found it easy to report on the information given by the leaders who were readily accessible.

The tragedy is: media always wants to focus on one or two leaders whom they can easily approach and get the feed back on the developments. In the true sense, for media persons to interact with those people who live in remote regions was a difficult task. To do this, they would have to trek long distances where modern road network does not exist. Instead, they found the easy way to report on the basis of information provided by the leaders who were amenable to the reporters.

The goodwill of Chipko Movement has had a positive impact on the Appiko Movement in south India. The media gave wide coverage and it became part of the wider movements like Farmers Movement in Karnataka and India. The absence of visual media during the 1980s and the extensive coverage by print media of the issue of forest conservation, including the famous Silent Valley struggle indicates the wider impact of the role of media on building public awareness among common people.

LOCAL VS NATIONAL MEDIA

It is interesting to note that though the national and international media coverage was positive, at the local level, district and vernacular media was very critical of the Chipko Movement. It projected a very negative image, stating that the media attention given to the movement and the international coverage has resulted in a hype that has halted all the development work in the Himalayas. The local media put the blame on the movement pointing out that due to the overemphasis on protection of trees and forests, basic infrastructure like road building was withheld by the local government citing environmental reasons. In fact the negative

image created by the local media made villains of the Chipko activists in hills.

A similar pattern can be observed in case of Appiko movement, wherein the national and international media was supportive. The local media was initially supportive but at later stages played a negative role criticising the role of forest protection as an impediment to the development of the region. The reasons for this divergent support from the local and national media can be ascribed to the fact that the local media loses its charm once the issue gets national and international coverage. Any coverage by national daily newspapers or English-language magazines or international media creates a good will for the movement which is difficult to digest for the local media and petty politicians who also control the media. It also suggests that the movement is not dependent on the local media for support but has allies at larger levels which have a greater impact on people.

In case of Chipko and Appiko movement, it was much easier to elicit support for the cause of protection of forests as the common people felt the need to do something to halt the process of destruction of the forest resource. These two movements caught the imagination of the people and it provided an opportunity to express their solidarity for the cause. Gradually, the conflict over natural resources including the forests led to the emergence of other struggles like anti-dam, anti-mining movements in the country. They raised the basic questions on the model of development. These basic questions on the political economy of the use of natural resources were seen as anti-development.

The hill women in the Garhwal region of Himalayas launched the Chipko Andolan in 1973. In Reni Village, Chamoli district, a meeting was organised to discuss the ways to deal with tree felling in their forests. In this meeting, Gaura Devi, the elderly woman, gave the call to embrace the trees in order to save them from the axe men. The contractors had sent them to fell the ash trees that are used to manufacture cricket bats. The women were more worried about the disappearance of forests around their village which had caused hardships to the hill women. The idea of embracing the trees, protesting in a non-violent way appealed to the villagers and they initiated the action that led to driving away the axe men.

The economy of the Himalayas is heavily dependent on the available biomass, especially the fodder and fuel wood. Fodder for the livestock is the main link to the farming systems as it provides farmyard manure for the agricultural crops and it also provides nutrition to the farmer's family.



As outside contractors felled the forests for timber, the village women had to walk longer distances in search of fuel wood and fodder. The existence of natural growth indigenous forests met their needs. As they experienced the hardship due to felling of forests around the village, they were keen on taking action to conserve the forests. The Sarvodaya activists supported the call of hill women and they joined them in launching of tree hugging Chipko Andolan.

The Chipko Movement spread to many parts of Garhwal region in Himalayas, especially in those areas where Sarvodaya workers had already established the contacts with local people. Over the last three decades the movement has made an impact on local, regional and national levels. It also got international attention due to the emerging ecological awareness in the world.

The media coverage at international level emphasised the non-violent Gandhian approach of the movement and the fact that it was started and led by village women. For the international press the organic link with the Gandhian ideology and the continuation of the non-violent struggle of the village women became very crucial which attracted the attention of people in western world. It was much different form the emerging ecological trend in the west.

Over the decades of grass roots activism three main phases of Chipko Movement can be traced that have been responsible for sustained action. These phases are: Economic phase, Ecological Phase and Regeneration phase.

ECONOMIC PHASE

The logging in Himalayas was basically an economic activity that helped to provide sustained supply of timber for the industries in the Gangetic plain. The contractors, who belonged to the cities, carried out the logging. It was believed that the benefits of the logging activity, accrued to only the contractor and his labourers, mainly from Nepal.

With this premise the Chipko volunteers demanded that the contractor system used in extraction of timber be stopped. Instead, they put forth the demand for establishing the labourers co-operatives to replace the contractor system. These labourer-run co-operatives were seen as the ideal system where the labourers would be getting the benefits from the logging rather than the contractor who was not a local person. It was

also assumed that the local labourer would be more caring towards the forests and would follow management systems that would be beneficial to conservation of the forest resources. It has the twin objectives of economic justice and ecological prudence. This socialistic goal of the movement was the main force for scarping of the contractor system.

The government agreed to this demand of the movement and then in many areas the logging was handed over to these co-operatives managed by the labourers. In many areas the Sarvodaya workers were involved in setting up of the labourer co-operatives and running these institutions with benefits being shared by the labourers. This definitely helped to bring numerous employment opportunities to the hill people who were given the work of logging. They successfully implemented the legal minimum wages as well as other welfare schemes for the labourers.

They also established small scale industrial units based on local timber and resin extraction. These small-scale activities did help in bringing the income to local people. However, the large-scale timber extraction continued unabated in the hills leading to deterioration of the conditions of hill women who had to walk long distances for fetching fuel wood, fodder and water. Though the women launched the movement to conserve these natural resources, the state and the volunteers of the movement provided an economic solution that had no relation to the hardship faced by hill women.

ECOLOGICAL PHASE

It was in Hevanal Valley in Tehri district that the hill women challenged the economic phase of Chipko and initiated the ecological phase. In late 1970s the hill women were protesting the tree felling by the state forest department. They had tied the sacred thread of *rakhee* to the trees that were marked for felling. The villagers had kept vigil for several days. In order to convince the hill women, a high-ranking forest official came to the forest to meet the women and Chipko activists. In this meeting the forest officer tried to convince the villagers about the commercial benefits of timber and he coined the slogan:

*What do the forest bear?
Resin, Timber and Commerce
Resin, Timber and Commerce
Is the road to bring prosperity*



The village women spontaneously responded to the forest officer with their slogan as follows:

*What do the forests bear? Soil, Water and Pure Air
Soil, Water and Pure Air
Is the basis of life and prosperity*

This spontaneous response of the hill women gave the ecological turn to the movement. The activists realised that they were fighting for economic benefits whereas the women were asking something more, to bring back the prosperity through conservation of the natural resources including forests. For village people the basis of development was dependent on availability of the biomass for agriculture and livestock and the need to protect the water sources. This change in the perspective of the activists due to the grass roots exposure of people's vision led to evolution of an entirely new demand to the government. The demand was a moratorium on felling of green trees in Himalayas for commercial purposes.

Through these actions the women wanted to exercise their right over the forest resource. It was a political demand with ecological and economic objective. This ecological phase was the toughest time for the Chipko activists as the demand was to change the forest policy from its commercial to ecological objective. After sustained actions in numerous regions in Garhwal, the movement eventually succeeded in pressurising the government. The government put a moratorium on felling of green trees above 1000 metres in Himalayas. This victory of the hill women inspired the numerous villagers to launch the regeneration phase to conserve the natural resources in the villages.

REGENERATION PHASE

The hill women have not only halted the deforestation by their non-violent action, but they have taken the responsibility of regenerating the forest in barren land. According to a rough estimate there are about 1,568 villages in which the women have taken control of about 20,000 hectares of barren forestland and they have brought back the greenery through regenerating the indigenous forests.

In most of the villages it is the Mahila Mangal Dals (Women's groups) who have taken the spontaneous initiative to regenerate the land. They have set up their own Watchwomen to take care of the forests near the village. Though planting of indigenous trees is done, in most cases they help the regeneration of local species. Through the concept of social fencing, the

village livestock is not allowed to graze inside this forest. The extraction of fuel wood and fodder is also controlled. It is based on the principle of equity and the need. The villagers laid out rules for management of the forests. All the households in the village are members and they actively participate in protection and regeneration of forest resource. Those who violate the rules are fined. This innovative approach to conservation of the natural resources has spread to many villages in Himalayas to adjacent Himachal Pradesh.

The most fascinating aspect of the regenerative model is: with very little or without any outside financial support or aid from the so called financial institutions, these village women have succeeded in greening the barren Himalayas. The success can be attributed to the active participation and decentralised control of the natural resources, which has helped them to reduce their hardship. They are able to reap benefits from the regenerated forests as they can collect the biomass like fodder and fuel wood from these.

Though Chipko has received worldwide media coverage due to its ecological philosophy, the credit of sustained action should go to the simple hill women. The media at regional and national level has given importance to the movement and this has helped to spread the message across the length and breadth of the country. The Chipko songs and the trans Himalayan *Padyatra* of 4,870 km from Kashmir to Kohima did succeed in spreading the Chipko message to numerous states in India and in Bhutan and Nepal. Movements similar to Chipko were launched in south India known as Appiko Andolan.

APPIKO MOVEMENT

Like a migratory bird the Chipko ideology traversed 2,500 km from the Himalayas crossing the central India and taking roots on the west coast in the Western Ghats in south India. It got a different name with the same tone known as Appiko (meaning hug the trees in Kannada language) Andolan.

Western Ghats or the Sahyadri mountain range along the west coast of India is well known for tropical forests. Considered as one of the 18 biodiversity hotspots in the world, it is the catchments of major rivers that provide irrigation to thousands of hectares in the deccan plains. It is also host to numerous endemic species of flora and fauna. Spread across the west coast from Kerala, Tamil Nadu, Karnataka, Goa and Maharashtra. It is one of the important ecological regions of south India.



Over the years monoculture teak and eucalyptus plantations to meet the commercial revenue of the state have replaced the tropical forests. These large-scale monoculture plantations have had negative impact on the local agricultural economy. The reduction of biodiversity and the tree cover had caused drying up of the water sources and scarcity of biomass for agricultural inputs. As the agricultural yields started dwindling, the people were very concerned about the depletion of the forests.

In Sirsi taluka, Uttara Kannada district, Karnataka, the Youth Club in Balegadde village wrote to the forest officials against the clear felling of natural growth forest to convert it to teak plantations. The forest department replied stating, 'It was being done as part of the scientific forestry policy of the state government.' Having read about Chipko Movement, the villagers invited Sunderlal Bahuguna of Chipko Movement to their village. They travelled to the forests that were marked for clear felling. Thereafter the villagers took an oath to protect the forests by non-violent Chipko Movement or locally known as Appiko. Inspired by the Chipko Movement the local people launched Appiko Andolan or Movement in Kelase forest, near Salkani village in September 1983.

Initially the demand of the Appiko Movement was to halt the clear felling of natural forests and conversion to monoculture plantations. The launching of the movement was a threat to the government policy. They tried every means to stop the spread of the movement. However, the hidden hardships of the people and the conflict over the natural resources led to the spread of the movement in numerous districts of Karnataka from Kodagu in the south to South Kanara and Shimoga districts.

Essentially the local vernacular press at the state level in Bangalore played an important role in spreading awareness about the movement as well as putting pressure on the government to respond positively to the endeavours of the movement to protect the tropical forests. The positive role played by the media did help in creating awareness as well as communicating the message to the common man. The coverage by the media in newspapers and magazines in Kannada language has created a legend of Appiko in the minds of people. That is really a great positive contribution of the media in building a movement.

Realising the widespread peoples support and regular media coverage in newspapers on the movement the government agreed to stop the clear felling of the natural growth forests to teak plantations. However, the activists realised that the timber concessions given to wood based industries and even removing of two trees per hectare was causing large-scale damage to the existing forest resources. In order to halt further

process of deforestation and threat to the existing forests, movement put forth the demand of moratorium of green trees in the natural forests in Western Ghats.

Well-organised grass roots actions over a decade and pressure from numerous groups forced the state government to change the forest policy. In 1989 the state government imposed a ban on felling of green trees in the natural forests. This ban continues till today and thanks to the Appiko Movement and positive response of the state government it has taken action to conserve the forests.

PHILOSOPHY OF APPIKO MOVEMENT

Inspired by Chipko the Appiko movement evolved its own philosophy of conservation and regeneration of natural resources in the tropical Western Ghat region. The broad goal is to strive towards establishing a harmonious relationship between man and nature, while protecting the tropical forests. The Appiko coined the slogan in Kannada as Ulisu, Belasu and Balasu. Ulisu in Kannada means, to save, Belasu is to regenerate the forests and Balasu means rational use of the tropical forests.

The coverage of existing natural forests in Western Ghats is very scarce, only in the interior hill regions or inaccessible mountain ranges. But there are constant threats to these existing forests from numerous developmental schemes like dams and infrastructure projects like railways and power plants. These natural growth forests play a very important role in providing water and food security to millions of people in and around the Western Ghats. In order to protect the interests of the communities and forest dwellers, Appiko Movement aims at protecting these remaining forests through grass roots action, creating awareness among the local communities and direct action. Thousands of such grass root groups are keeping vigil to conserve the remaining tropical forests. Appiko has become synonymous with forest conservation as people take to direct action even in cities like Bangalore to protect trees from being felled.

In Belasu, growing the forest, the emphasis is on natural regeneration of the indigenous species, and in planting, following the philosophy of five F species. These are Frit, Fodder, Fuel wood, Fertiliser and Fiber. This activity of regeneration is to be done by the village communities involving forest dwellers and women. Additional emphasis is on growing the non-timber forest produce that helps in providing the livelihood to forest dwellers. Thus, forestation is an alternate to the existing logging activity, helping them with a source of income and employment.



The third objective of Balsu is to evolve methods of using the forest and other natural resources rationally, without harming the resource base. To achieve this objective we work with the communities to install fuel saving stoves, solar devices, and biogas plants to propagate the alternate energy resources. Appiko is actively involved in helping forest dwelling communities to carry out sustainable harvesting of non-timber forest produce and value addition to increase their income. These opportunities provide the livelihood options for the forest dwelling communities in tropical forest region. These are economically viable and ecologically sound with least impact on the existing natural resources, especially the tropical forests.

The awareness created among the common people in the region has made the movement very popular and it has got legendary status. The essence of the movement has been incorporated into literary and art works by well-known writers and artists. Yakshagana is one of the popular folk dance dramas of the region. The philosophy of Appiko has become part of this Yakshagana. This medium of communicating the message of the movement has been very effective in creating the awareness about forest conservation in the region.

The role of the media in reporting the events of Appiko actions in the various regions of Karnataka has had its effect on policymakers and forest officials.

MEDIA AND THE MOVEMENT

The role of media since 1990s, as part of the globalisation process has changed the scenario with regard to the coverage of the people's movement. The proliferation of the numerous mofussil editions of both national and state level newspapers has led to restricted news coverage in the particular editions, which means the news does not go beyond the district or even parts of the district. This trend is observed in all parts of the country and the narrowing down of the coverage means the local struggles do not get wider coverage. It gets bogged down to a small town coverage whereas during pre-globalisation era it would have got at least state level coverage. This narrowing down of the coverage is a great loss to the movement as well as to the cause of environment.

Looking back at these two movements, it can be concluded that both of them were launched by local forest dwelling people and were spontaneous. These spontaneous actions led to wider support in many parts of the country spear heading decentralised movements with local

leadership. They have had a major impact on the forest policy at regional and national level. They used media as well as local communication methods like folk songs, dance dramas and *Padyatras* for spreading the message of the movement. These tools had a major impact on reaching the common people and eventually motivating, inspiring them to launch and sustain the grass roots movement for bringing the policy change.



SECTION TEN

An Anil Agarwal Reader

Anil Agarwal (1947–2002) was a mechanical engineer educated at the prestigious Indian Institute of Technology Kanpur, who recognised the importance of environmental journalism early on. Leaving aside the field he was trained in, he took to journalism and went on to found the Centre for Science and Environment in 1980. He was the editor of *Down to Earth*, a science and environmental magazine, which influenced the debate on environment significantly across India. In 1987, the United Nations Environment Programme elected him to the Global 500 Roll of Honour for his work both within Indian and abroad. The Indian government honoured him with the Padma Shri and Padma Bhushan awards for his contribution in the fields of environment and development. But more than all, Anil has shaped us as writers and contributed significantly to making us recognise the importance of the environment in our daily hack work. This section is a tribute to him by the co-editors (Acharya and Noronha) on behalf of the many scribes whom he inspired in his five decades on this planet.



Media Games

Anil Agarwal

(15 December 1998, Down to Earth)

The manner in which the media reports intergovernmental environmental conferences is unbelievably biased and distorted, which means that independent and informed public opinion can never be built on contentious environmental issues. This is indeed a very serious matter.

As I had to leave Buenos Aires a few days before the end of the climate change conference for the US, I carefully scanned leading publications such as Washington Post, New York Times, Time and Newsweek to find out what finally transpired in this highly contentious meeting. Having been a journalist in India, I know how many reports are straight hand-outs of the government's Press Information Bureau. But these so called 'international papers' were absolutely no different. Their reports were nothing more than a total parroting of the US perspective. They read as if there was no dispute between the US and the European Union (EU) or between the US and the Group of 77 (G-77) and China. And even to the minor extent that these disputes were mentioned, they were painted as inane and inconsequential. As a result, the US media was making no effort to help the US public understand the issues confronting the globe.

For instance, every US newspaper praised the two renegade developing nations, Argentina and Kazakhstan, for taking on 'voluntary commitments' for reducing carbon emissions. But nobody bothered to point out that they were strongly criticised in Buenos Aires for breaking the unity of the developing world. These two countries were held up as paragons of environmental virtue in the US press—as nations which were very worried about their contribution to global environmental harm, which is nothing but a total lie. Both these countries have no interest whatsoever in the global environment. They were only trying to earn brownie points with the US government in return for political and economic gain because the

US was the only industrialised country holding up the process, arguing that it will not ratify the Kyoto Protocol unless developing countries also take on commitments.

Unfortunately, the Kyoto Protocol cannot go into operation until two countries, the US and its partner Russia, sign the protocol. Everybody, thus, strongly felt that USA was holding the entire global process to ransom with its insistence on developing country participation, which is not even a condition in the Kyoto Protocol.

Argentina tried hard to get a discussion going on 'voluntary commitments' but its proposal was literally shouted out. Argentina had promised to 'deliver' a large number of Latin American countries to the US with promises for voluntary commitments but finally failed to find a single ally from the region.

The Buenos Aires meet was split between three groups. The US, the most powerful nation, constituted one group, and its biggest concern was 'economic effectiveness' of the Kyoto Protocol; in other words, the cost of meeting its emissions reduction commitments. It wants to reduce emissions in developing countries, where reduction costs are far cheaper, to meet its own targets through emissions trading mechanisms.

But the second group in Buenos Aires, the EU, heavily influenced by the region's green parties, felt that this would destroy the 'ecological effectiveness' of the Kyoto Protocol, in other words, the protocol would not prevent global warming. It was therefore arguing that there must be limits on how much emissions industrialised countries can buy from developing countries. This suggestion was anathema to the US which does not want any such 'caps'.

The third group, the G-77 and China, was on the other hand saying that it has already been agreed that industrialised nations would take the lead in cutting emissions; if the agreement was to go overboard then there was a need to look at the 'social effectiveness' of the Kyoto Protocol. In other words, a decision needs to be taken on 'equitable entitlements' to the benefits of the atmosphere which would provide a long-term, equitable framework for dealing with the problem. But, forget it, none of these 'powerful papers' once mentioned the EU position or the G-77 position.

Public opinion in the US will be vital to solving the global warming problem because it is not the Clinton-Gore administration which is really against action on global warming within the US. It is the US Congress which has been convinced by the powerful automobile-oil industry lobby that global warming is not even a scientifically correct issue. It

is pressurising the US administration to refuse ratification of the Kyoto Protocol unless developing countries sign it, too. The US administration is in turn putting the heat on developing countries.

But does the mature US public, which did not agree with the impeachment of president Clinton despite his affair with Monica Lewinsky, agree with the US Congress that industrialised countries should not take action until developing countries also join? According to a survey of US public attitudes conducted in the University of Maryland, some 53 per cent of the respondents said that industrialised countries should start cutting emissions without any limits on developing countries, as against 44 per cent who were against the idea. This is why it becomes extremely important for the likes of the Washington Post and others we do better reporting in the US.

US media made no effort to help the US public understand the issues confronting the globe.



Saying It with Pictures

Anil Agarwal

(30 June 1996, Down to Earth)

My friend Paul Wapner, assistant professor of environmental politics at the American University in Washington, DC, has just published a book, *Environmental Activism and World Politics*. He argues that international relations is no longer the domain of governments, as most scholars in the field continue to believe. Civil society, aided by the growing web of international communications, is increasingly exerting an influence on international relations. He cites what is, indeed, the most dramatic case in this field, namely, that of environmental activism, which has resulted in numerous international treaties over the last few years.

I enjoyed reading the book because of the detailed description Wapner provides of the strategies that Greenpeace, Friends of the Earth and the World Wide Fund for Nature have adopted to influence international action. Greenpeace, of course, is the most widely known, and its strategy is probably the most focussed: the media impact it can create on the issue it is pushing for. Every journalist knows the simple maxim that a picture is worth a thousand words. And Greenpeace has internalised this lesson so well that it has turned it into an art. It organises action in such a way that the media gets not just words but pictures full of drama. Not surprisingly, when Greenpeace gets going, everybody sits up. Even the staid Economist has admitted that corporate PR managers should learn a thing or two about public relations from this doyen of Western green organisations. Wapner's book, thus, is engrossing, to say the least.

I hadn't quite finished reading it, however, when two friends from England turned up in Paris to talk to me about a film they wanted to make. In it, they wanted me to present my views on the environmental concerns affecting the Third World, and how the Western media has neglected to convey them to people in the North. We started talking, and soon

agreed that the media, especially the powerful visual variety liked simple messages because they were so much easier and effective to get across.

I too pointed out how I had once been deeply moved by a BBC documentary in which a huge rainforest tree was being hacked down. It came across like murder in paradise, and I immediately wanted to join the movement to protect rainforests. But within a few minutes, my mind started working, and I began asking questions: who was this man who was cutting the tree? Why was he doing it? Was it his economic desperation to get a piece of land to eke out a survival, or was he simply being paid by a corporation to meet the consumer demands of the rich? And then, no longer was the tree important in itself, but, the rest of the world, its economy, politics, rich-poor divide, issues of equity and justice, all became intertwined and important. But there was precious little of that in the film.

I felt disappointed. Yet, it was clearly a very moving film, and had successfully motivated millions to join the movement, albeit in a very naive manner. But if, indeed, it had tried to deal with all these complex issues, it could have ended up being a very confused and ineffective film. Probably that is why it tried nothing of the sort. The media is the victim of its own limitations.

Probably that is why organisations like Greenpeace have failed to educate the Western public about complex issues. Unfortunately, most Third World issues are complex. For instance, the West can't just say that the Third World should not develop further because there is the threat of global warming.

I remember having a public debate with a Greenpeace spokesperson at a press conference in London in 1991. The gentleman said India and China were also responsible for global warming and must begin to cap their greenhouse-gas emissions. I asked him for the basis of this assertion. Just the quantum of the two countries' emissions? But what about the sizes of their populations, their needs? And to factor all that into the equation, Greenpeace had to talk of how we share the benefits of the atmosphere, bring in issues of equity and justice on a mind boggling global scale, and so on. That was a bit too complicated for an organisation like Greenpeace to tell the rest of the world. So, all that I could end up concluding publicly was that his planetary politics was partisan and that he had no right to be the spokesperson for the world.

But as I talked to my friends about the film they wanted to make, I, ironically, had to confront the same problem that Greenpeace has handled with such aplomb. My message was that the Third World must have

development, but it must have it in a way that protects the environment and its people from harm, a large majority of whom are poor, which in turn raises questions about entitlements to nature's myriad benefits, 10'c'al democracy, equity, justice, transparency, and what have you. But all that was too complicated for a television documentary.

Immediately, we had to ask ourselves: how do we simplify this message so that it can be captured in a few, sharp images? We talked for hours. My friends almost missed their train back to England. They are still pondering over the problem. The television company is still interested. I do hope they can crack the problem and find those dramatic images, because I'd love to work on this film with them. The media, after all, is the creator of global consciousness, and we are all its victims.

The media, especially the powerful visual media likes simple messages, because they are easier to get across. But by avoiding the complexity of issues, it becomes the victim of its own limitations.



No Screen Presence

Anil Agarwal

(30 April 1999)

The world is changing rapidly. People have talked about globalisation mainly in economic terms. But the 21st century may see a form of political globalisation which could pose a serious threat to the 20th century concept of sovereignty. Political globalisation will be pushed by the same technological change which is pushing economic globalisation, namely, the dramatic changes that are taking place in communication technologies which are turning the world into a global village.

Human rights is today an area in which states are beginning to feel that they have legitimacy in intervening in another state's affairs. The ongoing North Atlantic Treaty Organisation (NATO) air raids on Yugoslavia are a fine example of foreign intervention in a nation's domestic affairs in the name of human rights.

A recent article in the *New York Times* points out that:

NATO's bombing in Kosovo (is) a clear sign that the West puts a higher priority on human rights than on sovereignty... On that same day, England's highest court ruled that General Augusto Pinochet, the former Chilean president, could be extradited to Spain on charges of crimes against humanity even though, under Chilean law, he is exempt from prosecution for the offenses alleged, which occurred in his own country. Both events dramatised the weakening of sovereignty... If slaughter and television come together, as they did in Kosovo, 'right-minded' people in Europe and America demand that their governments do something about it. (If television is absent, as it largely was from the genocide in Rwanda in 1994, the demand is much less insistent, however great the loss of innocent life may prove to be.)

Henry Kissinger also argues in an article in the *Newsweek* that the outcome in Kosovo threatens the West neither in political nor in economic

terms. For the European Union whose gross national product is larger than that of USA, developments in Yugoslavia will have almost no economic impact. Nor does Slobodan Milosevic threaten any 'global equilibrium'. In other words, it is human rights which is largely driving the NATO action.

But if television (TV)-consciousness can help to bring people closer together, there is a danger it can also promote inappropriate action. As R.W. Apple, jr, points out in the *New York Times*:

... the new ardour for human rights, even when fanned by violence and misery on the TV screen, stops well short of heedless passion... pictures of human calamity can arouse the western world to act, but pictures of western soldiers or airmen dying or suffering humiliation, as in Somalia, can quickly discourage action.

It is for this reason that Bill Clinton does not want to commit ground action in Kosovo to support NATO's air raids even to the point of risking failure and serious loss of face.

While TV will definitely continue to play an important role in generating popular emotions and thus influencing political decisions, especially in electoral democracies, it is important to appreciate the limits of the 'pop politics' generated by TV.

The message on the TV screen depends on the biases of the persons behind the camera. Rwanda received less attention than Kosovo because Rwanda is not in the backyard of Europe, whose people control most of the cameras. What is true of human rights is equally true of environmental concerns. One good TV programme on Amazonian rainforests can force politicians to take action to protect forests just as much as TV programmes can force them to protect Kosovars. Indeed, TV did play a key role in getting the western people exercised about the so-called 'global environmental issues' in the late 1980s—ranging from biodiversity and forest conservation to prevention of global warming. Scenes of majestic Amazonian trees falling to the axe of human beings can be quite moving. But western TV failed to pay equal attention to the desertification in Africa, even though it poses a serious threat to the very existence of some of the poorest people on Earth. It, therefore, received little political attention. Equally, the camera may fail to catch the non-western dimensions of environmental issues—like the importance of equity in developing a global action plan to combat global warming.

All this means that we are, in all probability, going to see a steady erosion of sovereignty as technological instruments for creating cross-country

consciousness continue to grow. But this amorphous process of ‘political globalisation’—if it can be so called—poses a serious challenge. The expansion of human ability to share human travails and tribulations is definitely a welcome trend. But if the instruments that create global consciousness largely remain in the hands of a few, human consciousness could easily become biased and prejudiced. This bias and prejudice, regardless of whether it is deliberate or inadvertent, could lead to inadequate or inappropriate political action. Leaders have quite a task to ensure that growing global consciousness leads to action that carries global consensus behind it. Leaders from the less powerful nations have an even greater responsibility to ensure that the world moves in this direction. Inaction could be worse.



About the Editors and Contributors

EDITORS

Keya Acharya is an independent journalist and researcher, who has been writing exclusively on environment and development for many years and has various national and international publications to her credit. She also teaches development journalism and development issues to media students in Bangalore, where she is based and has conducted several media training workshops. Keya has travelled extensively in the course of her journalism assignments, reporting from various countries on subjects as diverse as solid and hazardous wastes, to human rights, corruption, forestry and wildlife, climate change, agribiotech and others.

E-mail: keya.acharya@gmail.com

Frederick Noronha is a Goa-based journalist and the founder of the India-EJ, the environmental journalists' cyber-network that links those writing on green issues across India. His works focus on developmental themes and he recently launched an alternative book publishing venture, Goa, 1556 <http://goa1556.goa-india.org>. He is known for his work on Right to Information issues (including in unearthing the frequent-but-unnoticed crashes of Sea Harrier planes of the Indian Navy), and effectively linking campaigners who worked on a long and successful drive to launch community radio in India.

E-mail: fn@goa-india.org

CONTRIBUTORS

Kazimuddin (Kazu) Ahmed is an anthropologist presently working with Panos South Asia and is based out of Guwahati, Assam. He has earlier worked with *Down to Earth* and North Eastern Social Research Centre. His areas of interest include borders, migration, resource politics, identities,

conflict and media issues. He also experiments with documentary film-making and photographic documentation.

Shahidul Alam studied and taught chemistry in London University before taking up photography. He returned to his hometown Dhaka in 1984, where he photographed the democratic struggle to remove General Ershad. A former president of the Bangladesh Photographic Society, Alam set up the Drik Agency, the Bangladesh Photographic Institute and Pathshala: The South Asian Media Academy Institute of Photography. He has been a recipient of the Mother Jones, Howard Chapnick and Andrea Frank awards. Alam is also a jury member at numerous international contests including World Press Photo, which he has judged on three occasions. He is an Honorary Fellow of the Bangladesh Photographic Society and the Royal Photographic Society.

Pallava Bagla has been a globally acclaimed award winning photo-journalist for 20 years. He has written for *Science*, the prestigious weekly magazine of the American Association for the Advancement of Science (AAAS), Washington DC, for over a decade. He recently joined NDTV, India's well-known television channel, as science editor. His solo photo exhibition on water issues titled 'Drops of Life' has been displayed globally.

Bagla is also a still photographer working for Corbis, one of the world's largest photo agency owned by Microsoft chief, Bill Gates. His pictures have found place in respected magazines like *National Geographic*, *Time*, *Nature*, *New Scientist*, *Scientific American*, *Newsweek*, *Elle* and *The Economist*. He has published over 800 news and features stories in leading national and international publications; authored five books; edited five books and over 1,700 of his photographs have been published over the years. He was also a frequent contributor to the leading national daily *The Indian Express*. In 2006, he was conferred the National Award for Outstanding Effort in Science & Technology Communication in Print Medium. It is the highest honour of its kind for science journalism in India, given by the Union Ministry of Science and Technology. In 2003, he became the first Indian to win the 'Outstanding Journalism' award from the United Nations-sponsored Consultative Group on International Agricultural Research (CGIAR), the world's apex body looking after agricultural research and headquartered at the World Bank, Washington DC. Previously, he was awarded the prestigious science writing fellowship at the Marine Biological Laboratory,

Woods Hole, Massachusetts, USA in 1994. In 2004, he became a Fellow of the Leadership for Environment and Development (LEAD), London.

E-mail: pbagla@vsnl

Lyla Bavadam is a senior assistant editor with *Frontline* magazine. She writes on issues specific to the environment as well as on politics and development. She has been with *The Hindu* group since 1996 and has been a working journalist since 1992. Prior to this she worked with a documentary film unit that produced films and slide shows for clients like UNICEF, the Tata Institute of Social Sciences, Ministry of Human Resource Development, Government of India and the Public Health Department, Municipal Corporation of Greater Mumbai.

She was the first Bellagio Forum Fellow, a programme for Environmental Studies in collaboration with the Reuters Foundation Fellowship Programme. She also received the Panos Reproductive Health Media Fellowship for research that got published in a compilation *The Unheard Scream*. She was spotlighted at the Sanctuary Awards in the 'Defender of Nature' category because of her writings on the environment. She has written consistently on issues like the Narmada Dam, groundwater, drought and environmental policy.

Dionne Bunsha is an award-winning journalist in Mumbai, India, who has written about suicide deaths among farmers, religious strife in India, human rights, environment and a range of other crucial issues. She currently works for the *Frontline* magazine of *The Hindu* group. She is the author of *Scarred: Experiments with Violence in Gujarat* (2006).

Bunsha is a Knight International Journalism Fellow at Stanford University 2008–09 and has won several awards for her writing. She was awarded two of the prestigious Ramnath Goenka Excellence in Journalism Awards, 2006–07 for Environmental Reporting and Books (non-fiction), the International Federation of Journalists (IFJ) Journalism for Tolerance Prize for South Asia 2005, the Sanskriti Award for Journalism 2003 and the People's Union for Civil Liberties Human Rights Award 2003. She has a Master's degree in development studies from the London School of Economics and has also completed a diploma in social communications media from the Sophia Polytechnic, Mumbai.

Patralekha Chatterjee is a Delhi-based award-winning writer and photographer. She has reported on public health, human rights, environment and the economy from many countries for leading publications in Asia, Europe and North America including *The Lancet*.

Ardeshir Cowasjee (born 1926) is a renowned newspaper columnist from Karachi, Sindh in Pakistan. His columns regularly appear in the country's oldest English language daily newspaper *Dawn* and are translated to appear in the Urdu press. He is also Chairman of the Cowasjee Group and is engaged in philanthropic activities apart from being regarded as an old 'guardian' of the city of Karachi.

Kunda Dixit served as the Asia-Pacific Regional Editor of Inter Press Service, and later helped establish Panos South Asia in Kathmandu. He is now the editor and publisher of *Nepali Times* and is the author of the books *Dateline Earth* and *A People War*.

Nirmal Ghosh is a senior foreign correspondent for *The Straits Times*, based in Bangkok, Thailand. He has lived and worked in Singapore, Manila, New Delhi and Bangkok, and covered much of Asia as a photojournalist. He has been President of the Foreign Correspondents Association of the Philippines (1998–99) and of the Foreign Correspondents Club of Thailand (2008–09).

He has written on and photographed wildlife, and covered related issues like biodiversity and climate change for over 25 years and has authored three books on Indian natural history and wildlife. In 2004, he won awards for narration and conservation message at Missoula, Montana, USA, for the documentary film *Living with Giants* (camera Ashish Chandola). He is a Trustee of The Corbett Foundation, a wildlife conservation NGO working with communities living on the periphery of Corbett Tiger Reserve in northern India and in Kutch in western India. From 2001 to 2003 he was on the Steering Committee of the Government of India's Project Elephant.

Peter Griffin used to be in advertising and is now a journalist and web producer. He works in Mumbai and likes to get out to green, cool places with either mountains or water bodies in easy reach. He blogs at zigzackly.blogspot.com and helps run the writing community, Caferati. He is very impressionable: he became an environmentalist as a child when he saw an advertisement that said, 'Don't waste water; you'll need it later.'

Nalaka Gunawardene is Director and CEO of TVE Asia Pacific, www.tveap.org. Trained as a science writer and journalist, Nalaka has worked with print and broadcast media and later with development organisations across Asia for over 20 years. He co-founded TVEAP in 1996 as a non-profit, regional foundation using audio-visual and new media to



communicate development and social issues. Having originated the idea of *The Greenbelt Reports*, Nalaka served as its writer and executive producer. He blogs on media, development and society at <http://movingimages.wordpress.com/>

Pandurang Hegde has been with the Appiko and Chipko movements. After his post graduate study from the University of Delhi, he joined the Chipko Movement in the Himalayas. He joined Sunderlal Bahuguna in the historic Kashmir–Kohima Foot March along the Himalayas. Thereafter he came to Karnataka to help with the spread of Appiko Movement. He has been part of the movement for the past 25 years. At present he is motivating people to re-launch Save Western Ghats Movement to conserve the tropical forests in south India. He works as a freelance journalist, contributing articles on environment and development issues in three languages: English, Kannada and Hindi.

E-mail: appiko@gmail.com, appiko@sancharnet.in

Nandkumar Kamat is a microbiologist at the Department of Botany, Goa University, Goa. For years, he has been active in highlighting environmental issues in Goa and elsewhere and has an encyclopaedic knowledge of a vast range of issues of relevance to Goa.

E-mail: nkamat@unigoa.ac.in

Richard Mahapatra is the South Asia Regional Coordinator at the New Delhi office of the Bank Information Center (BIC), which partners with civil society in developing and transition countries to influence the World Bank and other international financial institutions to promote social and economic justice and ecological sustainability. Before joining BIC, Richard worked as the coordinator of the Environment and Poverty unit of the Centre for Science and Environment (CSE) where he conceived, designed and led campaigns on sustainable development. During his tenure as the news coordinator of the environment magazine *Down to Earth*, he reported extensively on environment-poverty linkages in rural areas, people's movements for rights over natural resources, and other livelihood issues. Before CSE, he worked as a correspondent in mainstream media for five years, focussing on Northeastern India.

E-mail: richardmahapatra@gmail.com

Max Martin is a special correspondent at the Bangalore bureau of the *Mail Today*. He writes on science and environment. From 2005 to 2007,

he edited the web publication indiadisasters.org and reported on tsunami rehabilitation. He has also freelanced as a photojournalist.

Email: maxmillanmartin@gmail.com

Meena Menon has been a journalist since 1984 and has worked with *United News of India*, *Mid-Day* and *The Times of India*, Mumbai and is at present with *The Hindu* as a special correspondent in Mumbai. She has won many fellowships, including those from the Centre for Science and Environment, Panos, the National Foundation for India, New Delhi and SARAI. Her articles on prostitution have been compiled into a book co-authored with Sharmila Joshi. She is also the author of *Organic Cotton: Reinventing the Wheel*, a history and compilation of organic cotton farmers in the country.

E-mail: meenamenon@gmail.com

Laxmi Murthy is currently Associate Editor, *Himal Southasian*, the monthly magazine published from Kathmandu. She has written widely on gender, environment and the links between the two. As a journalism instructor, she has conducted training courses for working journalists on reporting gender.

Ahmed Zaki Nafiz is a Maldivian journalist. He has been based in New Zealand and has worked in the Maldives. He has travelled extensively in Asia, Europe and the Pacific.

E-mail: ahmedzaki@xtra.co.nz

Sunita Narain has been with the India-based Centre for Science and Environment since 1982. She is currently the director of the Centre and the director of the Society for Environmental Communications and the publisher of the fortnightly magazine *Down to Earth*. In her years at the Centre, she has worked hard at analysing and studying the relationship between environment and development and at creating public consciousness about the need for sustainable development.

She has co-authored various publications like *Towards Green Villages* (1989), *Global Warming in an Unequal World: A Case of Environmental Colonialism* (1991) and *Towards a Green World: Should Environmental Management Be Built on Legal Conventions or Human Rights?* and has co-edited *Dying Wisdom: Rise, Fall and Potential of India's Traditional Water Harvesting Systems* (1997) and *Green Politics: Global Environmental Negotiations* (2000). In 1999, she co-edited the *State of India's Environment, The Citizens' Fifth Report* and in 2001, *Making Water Everybody's*



Business: Practice and Policy of Water Harvesting. She has also authored many articles and papers. Narain remains an active participant, both nationally and internationally, in civil society. She serves on the boards of various organisations and on governmental committees and has spoken at many forums across the world on issues of her concern and expertise. In 2005, she was awarded the Padma Shri by the Government of India.

Shree Padre is a farmer by profession, a journalist by obsession. Since over a decade, he has been zealously documenting and disseminating information on the common man's success stories of Rainwater Harvesting (RWH) from all over India. Under his editorship, *Adike Patrike*, a 21-year-old unique farm magazine of, by and for the farmers in Karnataka, started a pioneering campaign on RWH in Karnataka. He has been a columnist for *Vijaya Karnataka*, a leading Kannada daily, and has so far run 220 case studies in six years. He contributes regularly to www.indiatogether.org and *Civil Society*. He has written 11 books on RWH, ten in Kannada and one in English. Out of this, two books are on drought-proofing. He was in the forefront of the agitation against spraying endosulfan in the Kasaragod district of Karnataka.

He has received many state awards as well as the Statesman National Award for rural reporting.

E-mail: shreepadre@gmail.com

Shivaram Pailoor is news editor and Head, News Unit, All India Radio, Dharwad, Karnataka. He is also the trustee of the Centre for Agricultural Media (CAM), which he founded in 2000. The Centre, with an objective to promote farmer-friendly communication system, tries to build up alternative efforts in agricultural communication. He has launched a website: www.farmedia.org, as part of the venture.

Shivaram writes on developmental issues like soil and water harvesting, GM issues and farm-related issues for major news dailies and magazines in Karnataka. He has been working in the field of mass communication for 18 years. Having done his doctoral study on effectiveness of agriculture communication, he has initiated a correspondence diploma course (Kannada) in farm journalism through CAM in 2003. He is an Ashoka Fellow.

Email: shivarampailoor@gmail.com

Beena Sarwar is a Pakistani journalist, documentary filmmaker and artist. She has a BA in studio art and English literature from Brown University (1986)

and an MA in television documentary from Goldsmiths College, University of London (2001). She started her journalism career as an intern with the *Star Weekend*, Karachi in 1981. Her editorial positions include assistant editor at *The Star Weekend*, features editor, *The Frontier Post* (Lahore), editor, *The News on Sunday*, a weekly paper that she launched in Pakistan for *The News International* and OpEd Editor for *The News International*. She was a producer at Geo TV, Pakistan's first 24-hour news channel. She is a Nieman Fellow (Harvard, 2006) and a Fellow at the Carr Center for Human Rights Policy (2007). Her documentary films have been broadcast on various channels and screened at festivals in Pakistan and abroad. She serves on the board of Panos South Asia and is associated with the Pakistan–India People's Forum for Peace and Democracy (PIPFPD), the Human Rights Commission of Pakistan and the Women's Action Forum (WAF). She freelances for various publications in Pakistan and abroad, including Inter Press Service, and is on the editorial board of the monthly, *Himal Southasian*, Kathmandu.

Nandan Saxena is a poet and documentary filmmaker and was a television journalist earlier.

Sahana Singh is Editor of *Asian Water*, Asia's leading magazine on water and wastewater. She graduated from Delhi College of Engineering and worked for some time as an engineer in the Environment Department of HPCL Refinery in Mumbai. After winning two national essay contests, she made a career shift to writing. In 2003, she was one of the winners of the Water Media Network Journalists Competition conducted by the World Bank, and was awarded during the 3rd World Water Forum at Kyoto. Her winning article focused on the threat of marine organisms being transported to foreign waters through ships and wiping out local species. In November 2008, Ms Singh won the Developing Asia Journalism Award (DAJA) in the Infrastructure category, in Tokyo, where journalists from Asian countries competed. She lives in Singapore with her husband and daughter.

Malini Shankar is a Bangalore-based freelance environmental photojournalist specialising in content creation about anthropogenic environmental conflict that seeks to quantify the impact on wildlife conservation. She has specialised in writing about anthropogenic environmental conflict in the Western Ghats. Her articles have been published in *Deccan Herald*, *The New Indian Express*, *The Indian Express*, *The Times of India*, *The Hindu Group of Publications*, and Features Service Syndicates. She was the UN accredited correspondent covering the proceedings at the World Summit on Sustainable



Development in Johannesburg for Bangalore-based *Deccan Herald* in 2002. She has also produced 2–13 episodes of a series for All India Radio and around a dozen world service radio documentaries for Deutsche Welle and Panos Radio.

Her articles on Sariska and issues pertaining to tiger conservation have been widely published. Besides, she has just completed shooting for a multinational TV production called ‘Eco Crimes’ which is to be broadcast in 16 countries in nine languages over a three-year-period.

Devinder Sharma is an award-winning journalist, writer, and researcher respected globally for his analysis on food, agriculture and trade policy. Trained as an agricultural scientist, Sharma has worked for *The Indian Express*. He quit active journalism to research on policy issues concerning food and agriculture, biodiversity, genetic engineering and IPRs, and hunger, trade and food security. He is the author of *GATT and India—The Politics of Agriculture* (1994), *GATT to WTO: Seeds of Despair* (1996), *In the Famine Trap* (1997) and *Trade Liberalisation in Agriculture: Lessons from the First Ten Years of the WTO* (2005). His columns and writings have been widely published in India and abroad.

Kalpna Sharma is an independent journalist and columnist based in Mumbai. In over three decades as a full-time journalist, she has worked with *The Hindu*, for which she writes a column, *The Times of India*, *The Indian Express* and *Himmat Weekly*. She was one of the co-editors of CSE’s *First Citizens’ Report on the State of India’s Environment* (1982). She was also responsible for 15 years for *The Hindu*’s annual State of the Environment Report. She has authored *Rediscovering Dharavi: Stories from Asia’s Largest Slum* (2000) and co-edited two books with Ammu Joseph: *Whose News? The Media and Women’s Issues* (1994/2006) and *Terror, Counter-Terror: Women Speak Out* (2003).

Sudhendar Sharma, an environmentalist, was formerly with the World Bank. He is an expert on water, a keen observer of climate change dynamics, a critic of the contemporary development processes, and has been dividing time as a writer, researcher and consultant. He was a senior correspondent with India’s leading weekly *India Today* and the science editor for *The Pioneer* newspaper. He holds a Masters in agriculture and a doctorate in environmental sciences.

S. Gopikrishna Warriar is Lead Media Officer at The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). Earlier, he was principal correspondent at *The Hindu Business Line*, the south India

correspondent for *Down to Earth*, and assistant editor at the Indian National Trust for Art and Cultural Heritage (INTACH). He has been an experienced communicator and journalist specialising in agricultural, environmental and developmental issues. In his other work, he has developed relationships with key stakeholders for public-funded international research organisations and non-governmental organisations. As a journalist he has specialised in communicating complicated environment and science stories in simple language, with the ability to link the macro with the micro developments. His interests include writing, communication, travelling, reading, photography and cooking.

Email: gopiwarrier@gmail.com

Manori Wijsekera was a journalist and writer for several years, working for an English language daily, a business magazine and travel publications, before joining TVE Asia Pacific in 1998. As its Regional Programme Manager, she promotes the regional organisation's partnerships with dozens of broadcast, civil society and educational organisations across the Asia Pacific. Manori was production manager of *The Greenbelt Reports*, managing four film-maker teams across eight locations in India, Indonesia, Sri Lanka and Thailand. She also directed its Indonesian and Thai stories.