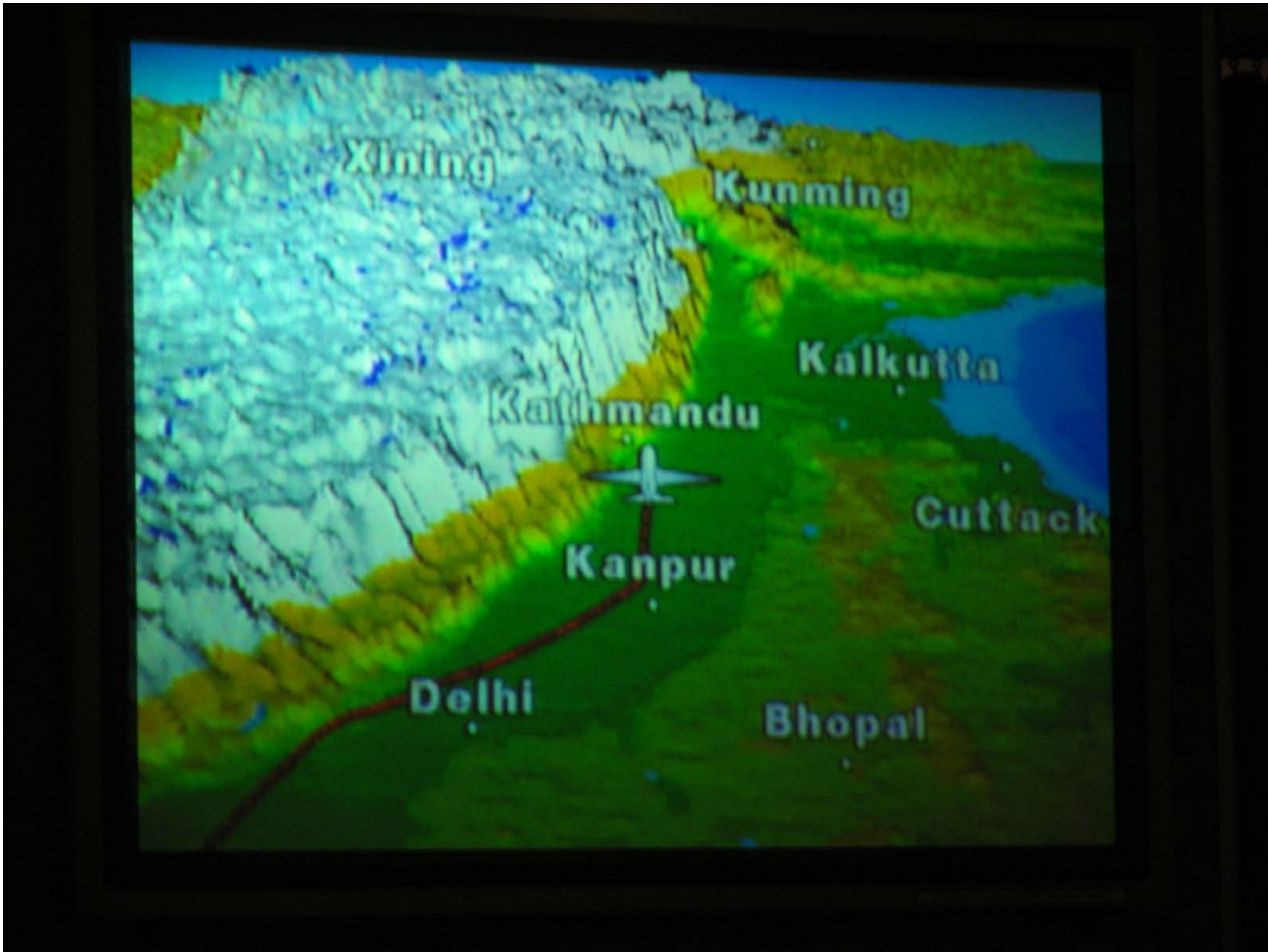
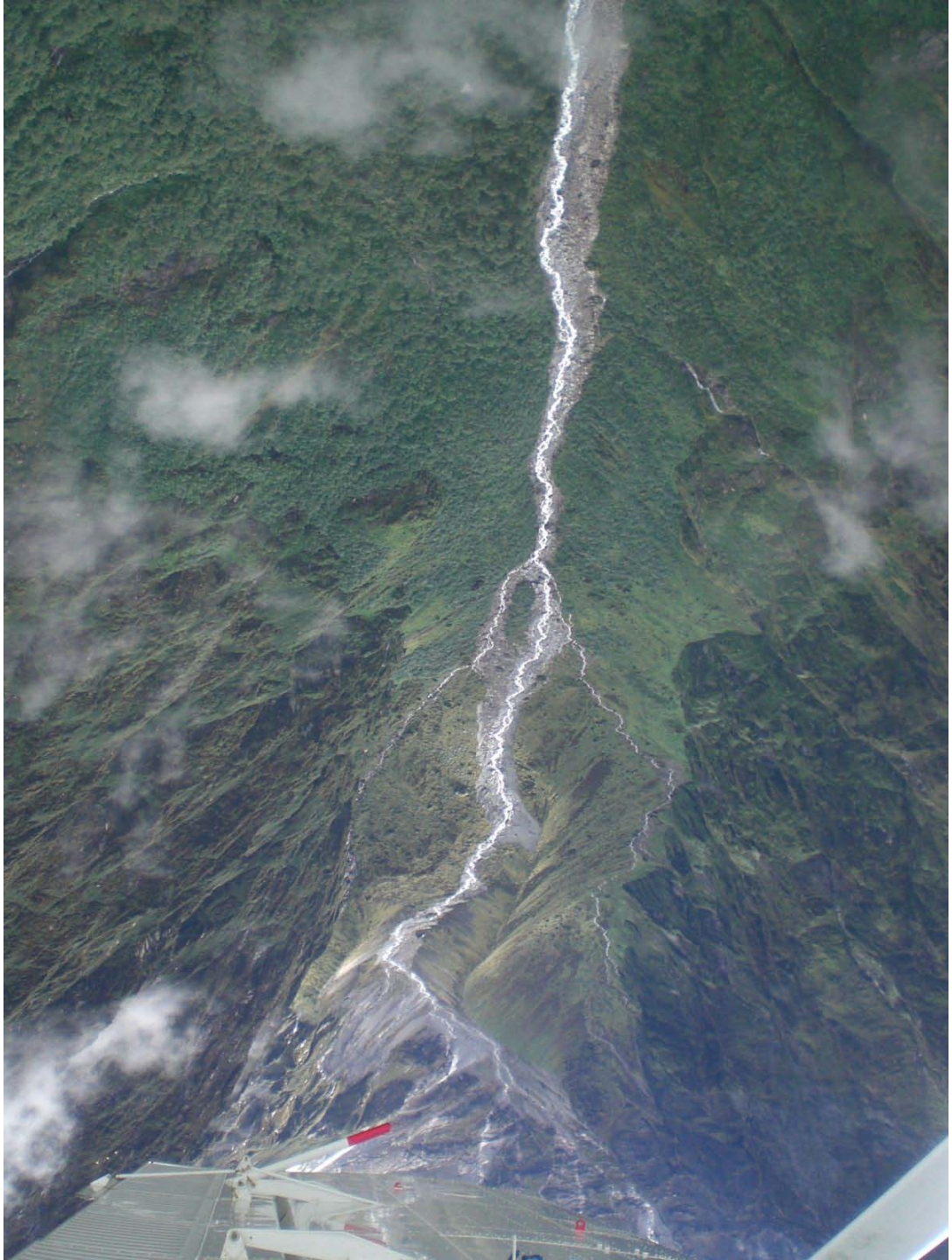
Climate for change

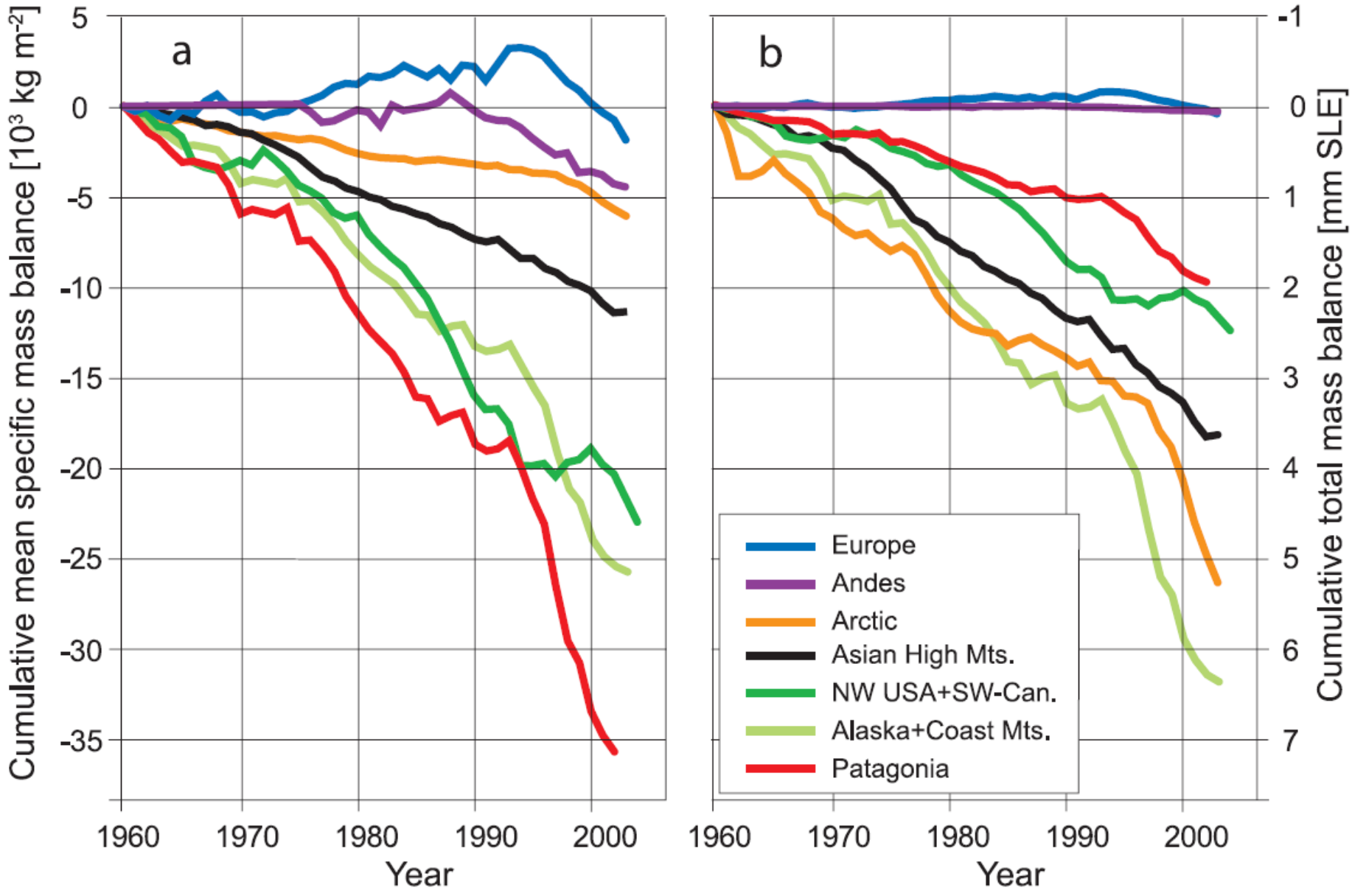
Kunda Dixit
www.nepalitimes.com

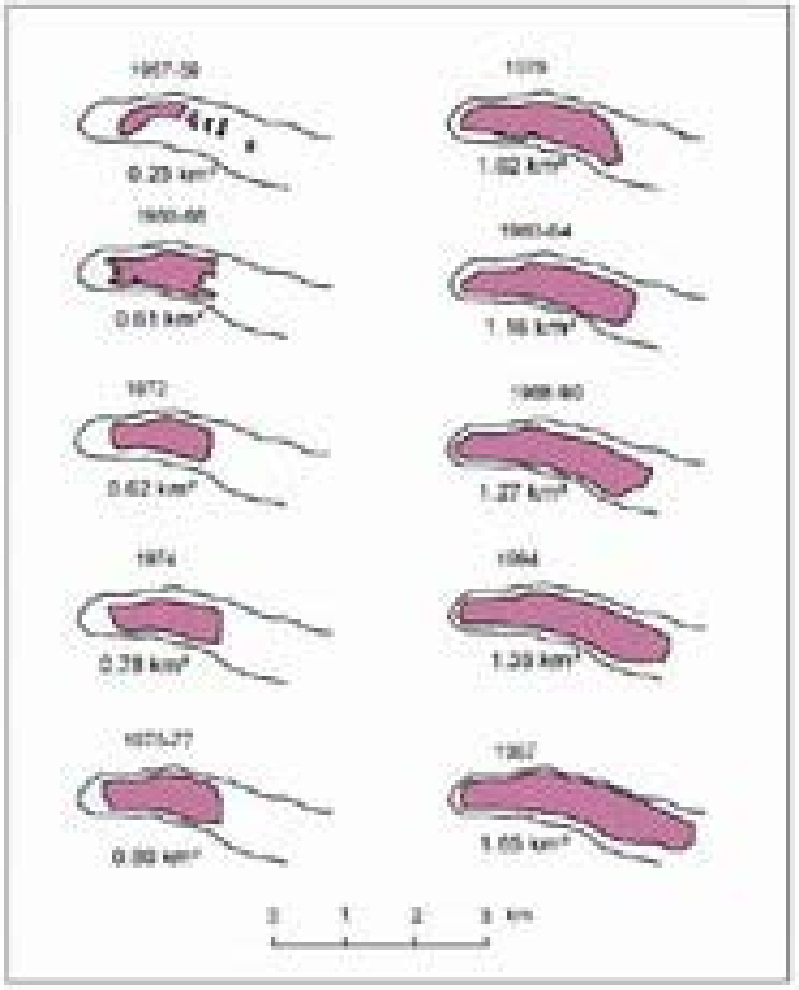

Xining
Kunming
Kalkutta
Kathmandu
Cuttack
Kanpur
Delhi
Bhopal



1955

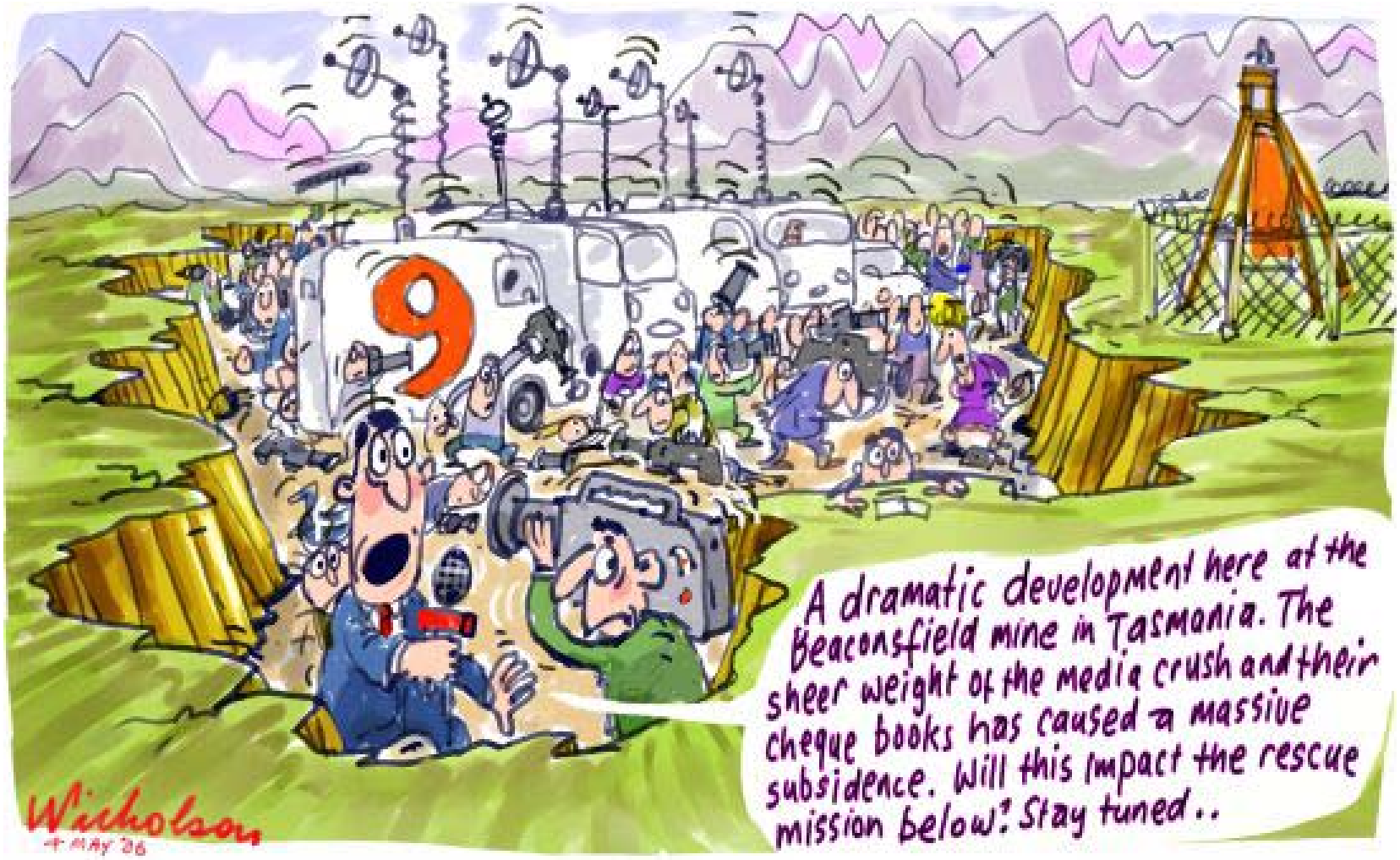
2008


a
b
Cumulative mean specific mass balance [10³ kg m⁻²]
Cumulative total mass balance [mm SLE]
5
0
-5
-10
-15
-20
-25
-30
-35
-1
0
1
2
3
4
5
6
7
1960
1970
1980
1990
2000
Year
Europe
Andes
Arctic
Asian High Mts.
NW USA+SW-Can.
Alaska+Coast Mts.
Patagonia


0 1 2 3 km


Dr. Ibrahim Didi
Minister of Fisheries and Agriculture


WHY DON'T THE GREENHOUSE GASES ESCAPE THROUGH THE HOLE IN THE OZONE LAYER?


9
A dramatic development here at the Beaconsfield mine in Tasmania. The sheer weight of the media crush and their cheque books has caused a massive subsidence. Will this impact the rescue mission below? Stay tuned..
Nicholson
4 MAY '06

Media is always there…

…after it happens

Media as early warning

12 1934

Coming soon

Nepalis need to remember the horror of 1934 so it doesn't happen again.

They say earthquakes don't kill people, houses do. But try telling that to the private home owners adding another floor to their fragile houses, or bribing an official to pass a house design so they can save money on construction. Most of us are acting like an ostriches with heads in the sand when it comes to preparing for the next big one.

Out of the 21 cities around the world that lie in seismic zones, Kathmandu is at the highest risk of death, destruction, and unpreparedness. Matters are not helped by the city's extremely high urban density: Kathmandu has an uncontrolled urban development with a 6.5 percent annual growth rate. The population hovers around two million and some 6,000 concrete houses are built every year, usually without proper engineering. It is not hard to imagine what will happen on a 8.0 magnitude earthquake. This city will collapse like a deck of cards when (not if) the next big one hits.

1934 wasn't even the worst earthquake Kathmandu has suffered. In 1255, one-third of the population of Kathmandu (30,000 people, including King Abhaya Malla) were killed when the valley suffered a direct hit with an epicentre right below the city. The effect of such a strong earthquake would be colossal.

Luckily, there are some who have seen the writing on the wall, and are working on ensuring that a maximum number of people are aware of the dangers. The first thing is to know what to do in an earthquake, what a community needs to do to prepare, how not to build houses, and when the big one does strike what can be done to care for the survivors.

The Dharara broke in half in 1934 (left) and the old Ghantaghar was reduced to rubble (right). The 'seismic gap' in western Nepal where there hasn't been a major earthquake in 200 years (see map).

"A massive awareness program is needed as our goal is to turn Nepal into a totally earthquake safe community by 2020," says Ramesh Guragain, a structural engineer. Indeed, a partnership between Nepali quake safety groups, the government and international organisations has resulted in a higher level of awareness about the dangers, now all that needs to be done is to put some of the disaster preparedness ideas into practice.

Historical records show that Kathmandu has been hit by a major 1934-type earthquake every 75 years. So, the next one is due, literally, any day now. But experts have discovered that there is even greater danger of a big earthquake in central Nepal,

Better safe ...than

Like most other parts of Kathmandu Valley, the village of Chaling outside Bhaktapur is also seeing a housing boom.

But look carefully, and a visitor notices a big difference. These aren't haphazard flimsy construction. Masons like 28-year-old Biswa Ram Tyaka and five of his colleagues have just finished rebuilding the Nateswari Primary School *(see pic)* to make it earthquake resistant with personal donations from villagers.

They have all been trained at the National Society for Earthquake Technology (NSET) in masonry work that will survive a major earthquake without serious damage. The six have already convinced locals that it is prudent to invest in earthquake resistant houses. These days, if anyone wants to build a house in Chaling and its surrounding villages, they go straight to Tyaka and ask for advice.

While it has been relatively easy to convince Chaling to follow the earthquake safety building code plan, experts face an uphill challenge doing the same in core urban areas of Kathmandu and other major cities. Earthquake Safety Day on 16 January will commemorate the 70th anniversary of the 1934 earthquake. It's as good a time as any to prepare for the next big one.

If Chaling's example can be replicated, maybe the rest of Kathmandu Valley and Nepal will be a safer place the next time an earthquake strikes.

An 8 magnitude earthquake in Kathmandu Valley is like nuclear war. Most of us don't want to think about it.

"I know it sounds scary but we are living under extremely vulnerable circumstances. The magnitude of destruction will be unimaginable," says Gyan Jung Thapa, national security officer at UNDP. Things could be worse, but they could also be better if we are prepared. Start now.

The job of most earthquake experts is to think of the worst-case scenario and plan for it. As things are now, what will happen to Kathmandu in the next major earthquake of 8 magnitude or above?

- 60 percent of the valley's

MIN BAJRACHARYA

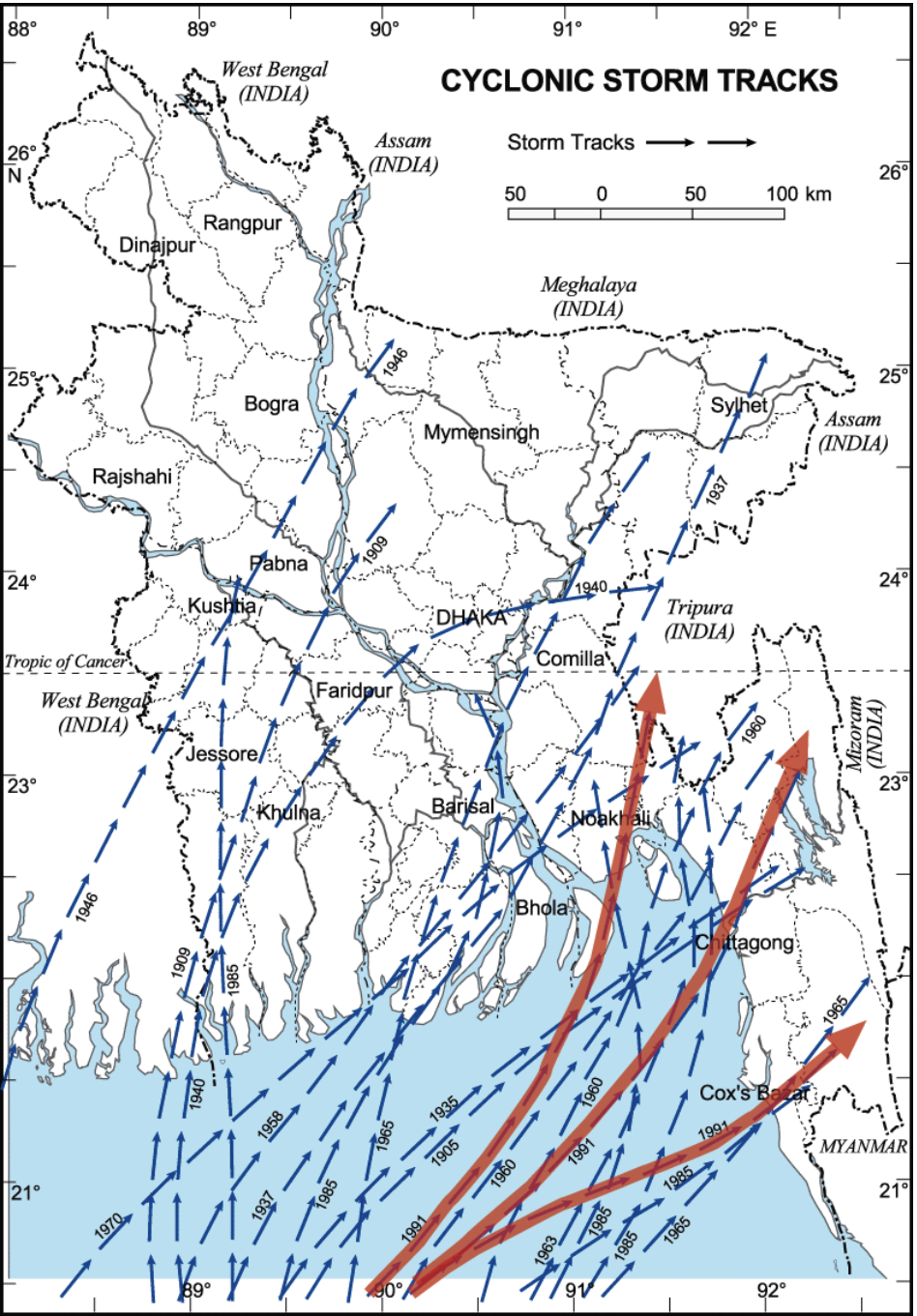
- >Don't cry wolf
- >Avoid media hysteria
- >Community mobilisation
- >Disaster preparedness
- >Alternatives
- >Economical to be ecologicial

Disastrous coverage

>Media not geared for slow emergencies
>Awareness not enough
>Media is not just journalism
>Public service role eroding
>It's a rich man's world

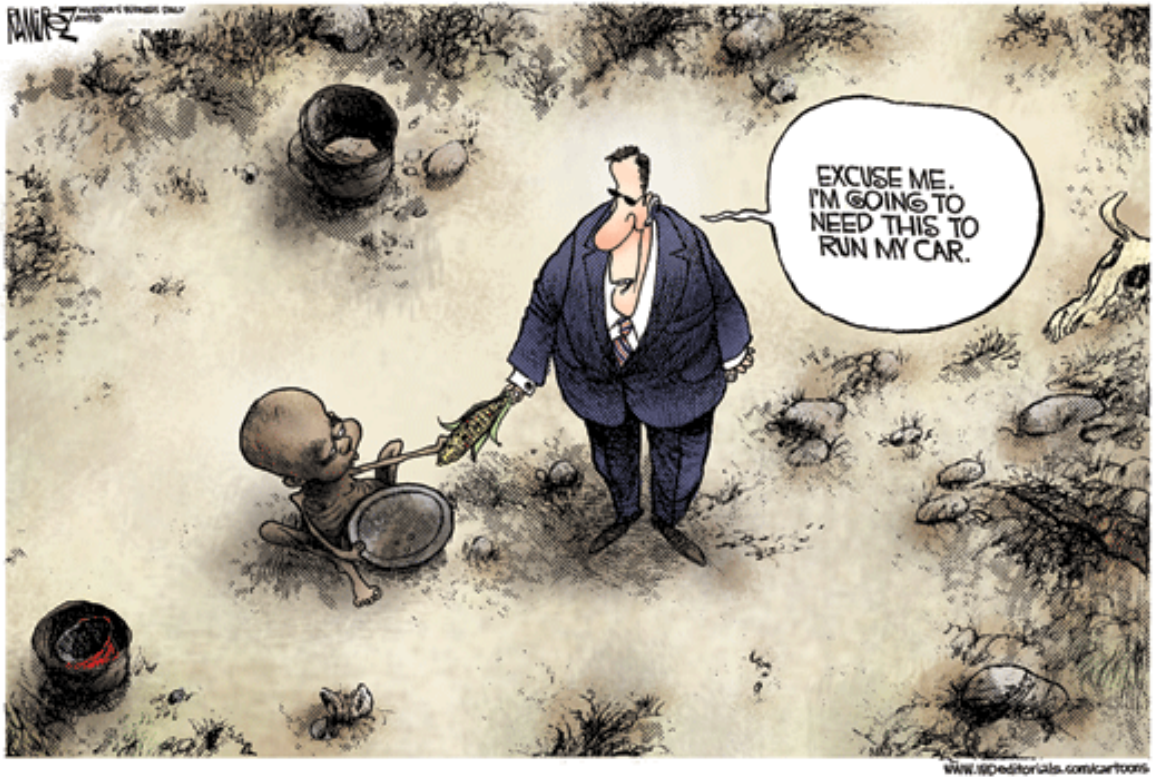
The message is the medium

>Policy makers
>Scientists, academics
>Domestic public opinion
>Vulnerable populations
>Outside world


CYCLONIC STORM TRACKS
Storm Tracks
50 0 50 100 km
88°
89°
90°
91°
92° E
26° N
25°
24°
23°
21°
West Bengal (INDIA)
Assam (INDIA)
Meghalaya (INDIA)
Tripura (INDIA)
Mizoram (INDIA)
MYANMAR
Tropic of Cancer
Rangpur
Dinajpur
Bogra
Mymensingh
Sylhet
Rajshahi
Pabna
Kushtia
DHAKA
Comilla
Faridpur
Jessore
Khulna
Barisal
Noakhali
Bhola
Chittagong
Cox's Bazar
1946
1909
1940
1937
1960
1965
1985
1991
1970
1958
1935
1905
1963

Message to policy makers

>Explain the science
>Cheaper alternatives
>Policy options
>Hazard mapping
>Longer-term horizon
>Disaster preparedness



>Climate change exacerbates existing crises
>Vulnerable even more vulnerable
>Social injustice, poverty, development
>Slow health emergencies
>Multi-disaster preparedness