

Central Water Commission
Water Systems Engineering Directorate

West Block II, wing No- 5
R K Puram, New Delhi-66
Dated 26.10.2018

Subject: Submission of News Clippings

The News Clippings on Water Resources Development and allied subjects are enclosed for perusal of the Chairman, CWC, and Member (WP&P/D&R/RM), Central Water Commission; the soft copies of clippings have also been uploaded on the CWC website.

Encl: As above.

P. Maheshwari
26.10.2018
SPA (Publicity)

o/c

Deputy Director, WSE Dte.

[Signature]
26/10/18

Director, WSE Dte.

[Signature]
26/10

For information to:

Chairman, CWC, New Delhi

Member (WP&P/D&R/R.M.), CWC and all concerned, uploaded at www.cwc.gov.in

News item/letter/article/editorial Published on 26.10.2018..... in the

Hindustan Times
Statesman
The Time of India (New Delhi)
Indian Express
Tribune

Hindustan (Hindi)
Nav Bharat Times (Hindi)
Punjab Keshari (Hindi)
The Hindu (New Delhi)
Rajasthan Patrika (Hindi)

Deccan Chronicle
Deccan Herald
The Times of India (A)
Business standard
The Economic Times

and documented at Bhagirath (English) & Publicity Section, CWC

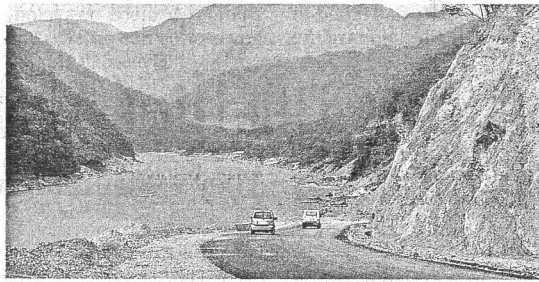
Students' body sniffs design in Tibet river breach

Barrels floating down Siang river trigger suspicion in Arunachal; AAPSU seeks water treaty with Beijing

RAHUL KARMAKAR
GUWAHATI

At least 100 barrels with Chinese inscriptions indicating explosive chemical content floated down the Siang river after a landslide-induced barrier upstream in Tibet gave way on October 19, an apex students' body of Arunachal Pradesh said.

The barrels containing isocyanate – a toxic chemical – and suspected explosive material could mean that Chinese agencies were carrying out construction activities along or on the Tsangpo (the Chinese call it Yalu-zangbu), the All Arunachal



The Tsangpo flows into Arunachal as the Siang, which meets two other rivers to form the Brahmaputra in Assam. ■ FILE PHOTO

Pradesh Students' Union said. The Tsangpo flows into Arunachal Pradesh as the Siang, which meets two other rivers to form the Brahma-

putra in Assam downstream.

Administrative heads of the three districts – East Siang, Siang and Upper Siang – said some local people

fished out a few blue cylinders that looked like cooking fuel but there was no evidence of chemical or explosive material having flowed down from the Tibetan region.

Plea to Home Minister

The district units of the AAPSU staged a demonstration on Wednesday besides submitting a memorandum to Home Minister Rajnath Singh seeking a formal water treaty with Beijing toward a solution to the Siang river crisis.

NGOs and riverbank dwellers blame construction

of dams and alleged Chinese plans to divert the water of the Tsangpo to parched areas of Xinjiang for the Siang river drying up and flowing with a very high tide in quick succession. The river also turns turbid periodically.

"The frequent change in the river's character has been pronounced in the last 18 months. It is time for New Delhi to be assertive and push for a water treaty with Beijing or all other rivers flowing down into India from Tibet will face the same fate as the Siang," AAPSU general secretary Tobom Dai said.

Hindustan Times
Statesman
The Time of India (New Delhi)
Indian Express
Tribune

Hindustan (Hindi)
Nav Bharat Times (Hindi)
Punjab Keshari (Hindi)
The Hindu (New Delhi)
Rajasthan Patrika (Hindi)

Deccan Chronicle
Deccan Herald
The Times of India (A)
Business standard
The Economic Times

and documented at Bhagirath (English) & Publicity Section, CWC

Our time begins now

India stands to suffer most from climate change. A road map to transit quickly to a near-zero carbon economy



SUJATHA BYRAVAN
& SUDHIR CHELLA RAJAN

Even at the time of its signing in 2015, it was clear that the Paris Agreement on climate change would not be enough to avoid global warming of 1.5° C over pre-industrial temperatures. In fact, early analyses revealed that the collective effect of Nationally Determined Contributions (NDCs) would result in 3-5° C of warming. More recently, there has been mounting pressure on India to raise its pledges further. The Intergovernmental Panel on Climate Change (IPCC) report on 1.5° C has come at a time when there are multiple alarms for India. Another study in *Nature Climate Change* identifies India as the country with the most expected damage from rising levels of carbon dioxide. How should India respond?

India's NDC is already ambitious and it has made decisive changes in its energy sector. Meanwhile, the U.S. has pulled out of the climate treaty, and the support of Australia and Brazil teeters on the outcome of their respective elections. Some countries are also doing less than they claim. According to Kevin Anderson at the University of Manchester, with aviation, shipping and trade counted, the U.K. has made no reduction to its greenhouse gas emissions.

A socio-economic challenge
India has two complex and inter-related problems. The first is to bring a vast population out of poverty and into decent lives. The second is to do this while dealing responsibly with the global carbon challenge and building resilience to climate change.

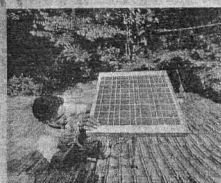
While India is often mentioned

along with China in climate-related discussions as a large emerging economy, the two are very different. India ranks 130 among nations in the Human Development Index, and China ranks 86. In spite of remarkable recent improvements, India still has 364 million living in multidimensional poverty. Nearly a third (27.5%) are multidimensionally poor and about a fifth (19.1%) are vulnerable to becoming poor. Almost half the country is therefore at high risk from events such as loss of a job or ill health of a family member. Combined with damage from a severe cyclone, flood or drought, each subsequent shock will have a multiplier effect on hundreds of millions, potentially pushing them deeper into poverty.

Add to this the current rural distress and the large youth bulge with few job prospects, and the country is in dire straits. It is clear that past development frameworks have not improved well-being across social strata. Instead, evidence indicates that economic growth has gone hand-in-hand with rising inequality and the creation of a small but powerful class of the super-rich.

SDGs are crucial

It turns out that the most sensible way to deal with these complex challenges is to deepen and expand India's commitment to the Sustainable Development Goals (SDGs). The synergies of meeting SDGs, reducing greenhouse gas emissions and adapting to a changing climate can only be fully realised if transformative and cross-scale changes are conceived, deliberated upon and tested widely. Further, "scaling up" may not be the correct way to think about what is needed; rather, replication with context-relevant modifications through local and institutional innovation may be more appropriate for a country of India's size and ecological diversity.



The 1.5° C report calls for societal transformation on a global scale that "reflect[s] the links, synergies and trade-offs between mitigation, adaptation and sustainable development." Recent events, however, show that we cannot trade off forests, urban water bodies, riverine ecosystems, waste management or groundwater as these come back to bite us as floods, landslides, droughts and infectious disease.

India, nevertheless, has a large number of successful examples of transformative innovation around energy production and access, land, livelihoods and climate resilience. The Bureau of Energy Efficiency showed how government 'nudges' are made effective through appliance labelling and large-scale procurement of efficient devices. In the building and cement industry, innovation around housing and new materials, including natural fibre composites, could make far-reaching changes in infrastructure through low-carbon modular technologies.

India expects to reach its ambitious solar target of 100 GW capacity by 2022 primarily through large centralised solar power plants, but these require significant amounts of land, water and evacuation infrastructure and support from mega-corporations. Instead, as some States have shown, renewable-based microgrids can become an important feature of electricity policy. Jharkhand, which has 249 remote villages powered by solar microgrids, is now considering their use even in vil-

lages that are already grid connected.

In the near future, entrepreneurs could make use of rapidly lowering storage costs to build decentralised, neighbourhood-scale micro-utilities, managed by locally owned enterprises and cooperatives. With modern power electronics and innovations in hybrid waste to energy, water recycling and community gardens could be integrated as standalone modules that are connected to larger grids.

Sustainable approaches to land are evident in cases such as forest conservation in Mendha-Lekha village in Maharashtra and community delivery of public services in Nagaland. These and several other instances are documented in initiatives such as Vikalp Sangam. Similarly, in a recent comment in *Nature*, Harini Nagendra points out that India has for long had strongly rooted cultural movements about living sustainably with land and its ecology that provide practical models.

Some research groups have recognised that agro-ecology methods are best suited for increasing crop yield, raising profits, trapping soil carbon, reducing dependence on fertilisers and pesticides. Successful models are already effective on small scales in many States. Andhra Pradesh is attempting to replicate widely one such approach, Zero Budget Natural Farming, to all its farmers by 2024 with an expected savings of 2 million tonnes of carbon dioxide per year. This is with 6 million farmers across 8 million hectares. If similar methods were used for the entire country, the savings would be substantial.

In transport and urbanisation, the challenge is to create isotropic communities in the areas of the peri-urban, the rapidly expanding hinterland, which would have to be designed around not cars but walking, cycling and sustainable neighbourhood vehicles. Work

and industry would also have to focus on the small and medium scale of about 300 employees and modest capital investments, which reduce the risk of speculation and jobless growth.

Energy and livelihood gains from such alternative visions could be far more significant than conventional ways of replacing fossil-fuelled infrastructure with renewables. But they also involve a lot of learning-by-doing, living laboratories and innovation, practice, patience and support from government and academia.

Putting plans into action

The next round of state action plans on climate change now being developed might begin with identifying successful development approaches overlaid with expected climate impacts in each ecological zone. Policymakers, with inputs from academia, community workers and the public, could then work on how these would be repeated in other contexts keeping climate impacts in mind.

Large investments are needed to make the transitions in each sector that would take the country to a near zero-carbon economy. But given the shortage of external support and the need for rapid deployment, India will not be able to rely entirely on external funds. Some of this could instead be financed through a 'luxury' carbon tax that curbs non-essential consumption. Savings can also be expected from the economic and social transformation itself.

Political pressure and activism across the globe may soon turn the tide in other countries, but India needs to begin now with its enormous untapped successes. We cannot be pressured from outside, but need to change from within.

Sujatha Byravan is a Chennai-based scientist. Sudhir Chella Rajan is with the Indo-German Centre for Sustainability, IIT Madras