CAREER CHOICE

Who plans for disasters

Debabratee Dhar interviews Saswata Sanyal of the International Centre for Integrated Mountain Development about a fairly new line of work

Q What exactly does your work entail? What is disaster management all about?

I work in disaster risk reduction, not disaster management per se. Disaster management focuses on managing events, their consequences and impact. They work for preparedness, for emergency response and relief, and reconstruction, recovery work.

Disaster risk reduction, or DRR, starts much earlier. A cyclone, flood or an earthquake is a natural hazard. It turns into a disaster because of what we do — build on riverbanks and unstable slopes, cut down forests, construct houses and roads that can't withstand the hazard, and not warn people in time. In DRR, we work on those conditions so that when the hazard comes, fewer people are hurt and less is lost. Since the Sendai Framework was adopted by UN member states in 2015, the global focus has been moving from managing disasters to managing risk.

Q So what is it that you do?

DRR has four major parts, starting with multi-hazard risk assessment. It means understanding underlying risks for a particular community. The second part is risk governance, which means what you do with the risk. Once you have understood the risk, how do you make risk-informed plans? The third part is investing in disaster risk reduction. That means putting money into making schools, hospitals, roads and livelihoods safer, and having financing such as insurance or contingency funds in place before a disaster. The final part is making communities more aware and prepared.



REUTERS/CNSPHOTO

GROUND ZERO: Search and rescue operations after the recent flash floods in Nepal. While disaster managers tackle the aftermath of devastating natural disasters, disaster risk reduction professionals prep for vulnerabilities well ahead. (inset) **Saswata Sanyal**

Q Tell me a bit about the International Centre for Integrated Mountain Development or ICIMOD.

It is an intergovernmental learning centre set up in 1983 in Lalitpur, Nepal. We work across the Hindu Kush Himalayas, a region that stretches from Afghanistan to Myanmar. These mountains are the source of 10 major rivers, including the Indus, Ganges and Brahmaputra. Their basins supply water to more than a fifth of the world's population. So what happens up in the mountains — glaciers melting, new lakes forming, slopes collapsing — affects people far downstream. Our work falls under three areas: reducing climate and environmental risks, shaping green and inclusive economies, and building healthy and resilient landscapes. DRR sits in the first.

ICIMOD has eight members — Afghanistan, Pakistan, India, Nepal, Bhutan, Bangladesh, China and Myanmar. We also work on trans-boundary aspects. For example, the August 2026 Rasuwa-Gyirong floods. The trigger was in Nepal but the flood hit communities in Nepal as well as China. My job is to translate whatever we know about risks into decisions that policymakers, investors and communities can act on.

Q What kind of formal training is required?

Mostly we see people coming from an engineering background. You could also have studied economics, the social sciences or communication, advocacy. We need people who have studied geography, who understand GIS mapping, doctors, nurses, public health professionals. There are many master's programmes in India right now. I went to TISS. One could opt for that or a professional training programme. One can also go for a PhD if one wants.

Q What about learning on the job?

My first job was in the Andaman and Nicobar Islands, and the 2004 tsunami showed how much traditional knowledge matters. When the sea suddenly pulled back, the Onge read it as a warning and ran to high ground, and survived. The Jarawa were in the forest and came through as well. The Sentinelese, who have no contact with the outside world, also survived. These communities have lived with that ocean for years, and the knowledge is still alive among them. The Nicobarese were affected much more. They are a larger community, more integrated into mainstream life and much of their traditional knowledge had faded. When the water receded, many went down to the beach to collect fish. Most villages on Car Nicobar were destroyed and on Great Nicobar, Nicobarese settlements along the west coast were almost entirely lost.

This is a stark example, but almost every community has some traditional knowledge that we need to build on. We also need to work with governments, local NGOs and research institutions. Being on the field could also mean going from one government office to another. Every government has funds allocated for such disasters. Our job is to convince them to utilise these.

Q How do you see this field evolve in the future?

We have not taken very good care of our Earth, so disasters are not going to stop. There is a lot of AI being involved. But we will still need engineers, geographers, social scientists, anthropologists, political scientists, social workers — we will need more people working in this field. They just need to bring their individual specialisations to the job.