Prof. Milind Sohoni teaches at the Centre for Technology Alternatives for Rural Areas and Computer Science and Engineering Department at IIT Bombay, and has been advocating the development of vernacular science—as an idea and pedagogy—in the way our schools and universities approach science education. Challenging the big science hegemony (“stem cells, nanotechnology and the poster boy, machine intelligence”), Prof. Sohoni asks, whom does big science deliver to? Deeply involved with finding local, regional and people led solutions to actual on-ground problems (“the chulha is not just a cultural object, but a scientific object”), The Third Eye explores the role of science education in our expectations of public health, and how, as we turn into consumers of science rather than producers, we forget that science has stopped serving those that need it most.

As a science educator, what was your reaction to the so-called vaccine hesitancy in the country?

I would like to not collapse the two: scientific temperament and vaccine hesitancy. But I do think that science education has failed us in a big way.

First, about the vaccine hesitancy; I think people made rational choices. In the first wave there were very few deaths, so people did not see the need for the vaccine, especially for those without comorbidities. But the second wave came, and the hesitancy disappeared quite fast. So, it’s a very rational hesitancy: “Do I need it?” And once they saw that the second wave was killing people, sure enough, people lined up.

But why I say science education has failed us is because of the way we failed to calculate the human cost of the [Covid] pandemic.

I studied in a Central School [now Kendriya Vidyalayas] and Central School textbooks are very good. But by classes 11 and 12, they are focussing on competitive exams or this national education. Instead, I wish the textbooks had exercises like let’s visit a bus depot, or let’s visit a good farmer and find out what the yields are, or let’s visit the PHC sub-centre, talk to the nurse, talk to the compounder, talk to the two doctors, just getting familiar with the PHC (primary health centre) as something which provides a critical health service would have helped a lot. Or spend time with an ASHA (Accredited Social Health Activist) worker. She has a notepad with names of people in a village and the diseases they have, which family has what medical emergency. How is it X village has so much diabetes and Y village has none?

So, I think it’s a bigger awareness, which science education has not built.

Are you saying science should speak to contexts?

I am saying that science education is not just about big science, and should not be about big science.

But if you look at the main central government departments populated by scientists, they are Space, Atomic Energy and Defence.

Okay, so we have missile men and women, big people in science, but really, so much of science in most of the developed world is really sadak, bijli, pani.