

Luc Soete

Professorial Fellow, UNU MERIT and formerly Rector Magnificus of Maastricht University, Netherlands

The most striking feature of Kerala highlighted in the budget and received much attention in the discussion is the highly educated labour force in Kerala. At first sight, it made me think of Richard Freeman's much acclaimed book of 1976 the "Overeducated American".<sup>1</sup> A book which led to a lot of discussion in the United States and was more or less proven wrong subsequently. But let me quote from Dr. Isaac's budget speech: "Unemployment of the educated is the biggest developmental challenge faced by Kerala. The present employment schemes are inadequate to resolve unemployment of the educated."

So clearly there is something like the "Overeducated Keralite". But (s) he (she might be even more appropriate) looks today more like the successful outcome of Jan Tinbergen's<sup>2</sup> "race between education and technology" in favour of education. If the race is won by technology as it did in most rich countries, inequality would increase: technological change increasing the demand for more skilled workers.<sup>3</sup>

If like in Kerala, the race is won by education, the outcome could indeed result in an overeducated workforce with relatively limited income inequality. However, as outcome, this is one which most policy makers in the world would only dream about. It is an outcome which makes Kerala probably the best placed economy in the world today to win the next "digital" Tinbergen race: to outperform the speed at which a whole range of new digital technologies, including artificial intelligence, are likely to be impacting today and in the near future all sectors in society.

In short, the overeducated Keralite is actually the main guarantee for Kerala to become over this decennium one of the most advanced digital economies and knowledge societies in the world.

It will though, as be highlighted in Dr. Isaac's budget speech, requires some specific policy action to exploit this specific higher education comparative advantage. First and foremost, addressing the high levels of unemployment of highly educated females; second, raising the quality of higher education; third, paying attention to the need for continuous technological upskilling and life-long learning (the Tinbergen race is never over...); fourth, invest in the availability of IT equipment and accessibility of IT infrastructure for all. A broad spectrum of actions needed.

A second factor complementary to the overeducated Keralite, consists of attracting (foreign) capital to Kerala. It is a factor which again has been given a lot of attention in Dr. Isaac's budget speech with the creation amongst others of the K-DISC, the Start-up Mission, the Kerala Innovation Challenge, the S.B Sen Innovation fund, a venture capital fund and even paying particular attention to the remittances of non-resident Keralites. So one can only encourage the Kerala government to be creative with measures activating capital, both based on public funds, domestically generated private savings and foreign capital.

In conclusion, I quote from the last 2006 Globelics slide:

"Knowledge sharing... shifts the attention away from the purely technological aspects of research to the broader organisational, economic and social aspects which are today in many cases a more important factor behind innovation, than the technological ones.

This holds a priori for countries with large populations where the potential for innovation, once users/consumers are identified as source of innovation can easily be enhanced. In doing so, innovation is less driven by the continuous search for quality improvements, typical of the old mode of technological progress, identified with the high-income groups in society, but by broader user needs across society. These needs are also evident in the poorer, bottom or base parts of society."

## **References**

Freeman R. 1976. *The Overeducated American*. Academic Press.

Tinbergen, Jan. 1974. Substitution of Graduate by Other Labour. *Kyklos*, 27 (2).

For more recent analyses see a.o. Sauer, P., N.D. Rao, S. Pachauri, March 30, 2015. *The Race Between Education and Technology Revisited: An Integrated Approach to Explaining Income Inequality*.