



Addressing the root-causes of poverty

This year's Prize in Economic Sciences is about effective methods for alleviating global poverty. Abhijit Banerjee, Esther Duflo and Michael Kremer are rewarded for their experimental approach to the issue of how to best improve living conditions for people in most need. Their research has fundamentally changed development economics and led to concrete results that are already being put to practical use.

One of the most important questions in economics is also the hardest one – how can global poverty be reduced? Despite great global progress, more than 700 million people still live on less than two US dollars a day. Every year, around five million children under the age of five die from diseases that could often have been prevented or cured with inexpensive treatments. Half of the world's children leave school without basic literacy or numeracy skills.

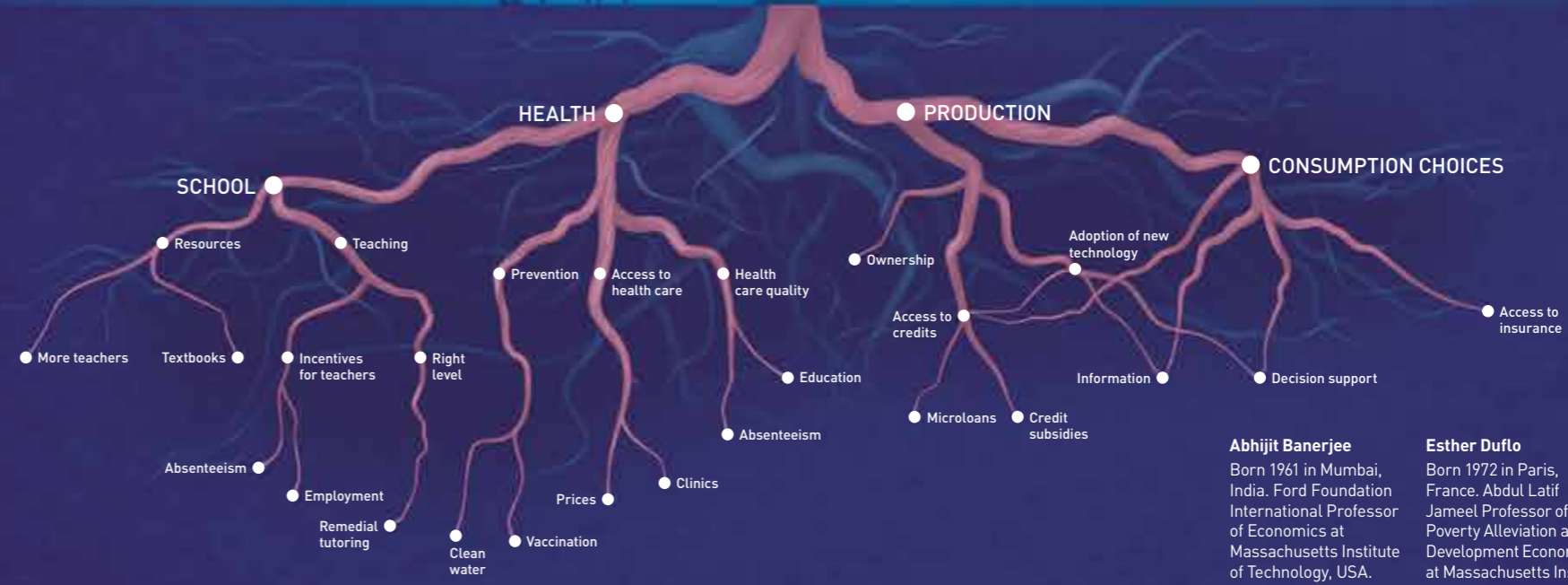
Banerjee, Duflo and Kremer showed how the problem of global poverty can be tackled by breaking it down into a number of smaller, but more precise, questions. They used field experiments to examine the root-causes of poverty and to test which interventions make the biggest difference. In these field experiments they studied how people behaved in their everyday environments.

There are several studies of schooling in low-income countries. Among other things, these studies have demonstrated that smaller classes or more resources (such as textbooks or free school meals) do not automatically lead to better educational outcomes. However, teachers who adapt teaching to the pupils' abilities have great impact. By now, programmes that adapt teaching to the right level have helped millions of pupils in India and Africa.

Other field experiments focus on better healthcare, access to credit or the adoption of new technology. For example, the Laureates have investigated why African smallholders do not use relatively simple technologies, such as fertiliser, even though they could significantly increase yields. One explanation is 'present bias' – the present takes up a great deal of people's awareness, so they tend to delay investment decisions. From a policy perspective, this is an important conclusion, because an offer that only applies here and now, such as temporary subsidies for fertiliser, will have a greater effect on usage than permanent subsidies.

There are numerous other examples of how the Laureates' research demonstrates new ways of alleviating global poverty. Their research has also had an indirect influence on the work of public authorities and NGOs, as they increasingly use field experiments to help them make better decisions and evaluate new measures.

Over just two decades, Banerjee, Duflo and Kremer have contributed to making research in development economics a flourishing field of mainstream economics. The experimental approach has already helped in alleviating global poverty and has great potential to further improve the lives of the people who are the worst off.



Banerjee and Duflo led a study that looked at how to increase child vaccination rates in rural India. It turned out that access to healthcare was decisive, as was the price. Mobile clinics, in which the staff were always on site, resulted in more children being vaccinated. Numbers were much higher if parents were also offered a bag of lentils as a gift. Because mobile clinics had high fixed costs, the total cost per vaccination was reduced, despite the additional expense of the lentils.



Parasitic infections affect one in four children in low-income countries and cause high levels of school absenteeism. Because worm infections are easily transmitted between individuals, mass distribution of deworming pills is cost-effective. In rural Kenyan schools, mass deworming increased school attendance by 25%. Kremer and co-author also showed that 75% of parents gave their children these pills when they were free, compared to 18% when they cost less than one US dollar.



Abhijit Banerjee
Born 1961 in Mumbai, India. Ford Foundation International Professor of Economics at Massachusetts Institute of Technology, USA.

Esther Duflo
Born 1972 in Paris, France. Abdul Latif Jameel Professor of Poverty Alleviation and Development Economics at Massachusetts Institute of Technology, USA.

Michael Kremer
Born 1964 in New York, USA. Gates Professor of Developing Societies at Harvard University, Cambridge, USA.



Photo portraits of Abhijit Banerjee, Bryce Vickmark, portrait of Esther Duflo, Bryce Vickmark, portrait of Michael Kremer, Jan Chase © Harvard University.