



A Peruvian woman with poultry received as part of an aid programme to encourage self-sufficiency.

DEVELOPING WORLD

Short-term aid has long-term impact

Experiment across six nations shows that two-year interventions help to lift people out of extreme poverty.

BY DECLAN BUTLER

Giving some of the world's poorest people a two-year aid package — including cash, food, health-care services, training and advice — improves their livelihoods for at least a year after the support is cut off, according to the results of an experiment involving more than 10,000 households in 6 countries.

The poverty intervention had previously been trialled successfully in Bangladesh, and the study's researchers say the latest work shows that the approach works in other cultures, too. "We finally have truly credible evidence that a programme for the poorest of the poor can really help them meaningfully reduce their poverty," says Dean Karlan, an economist at Yale University in New Haven, Connecticut, and a co-author of the study, reported last week in *Science*¹. "Until now, we haven't really been able to go to a government outside Bangladesh and say, we're confident this works."

Ethiopia, one of the countries in the latest trial, is planning to continue the intervention and scale it up to cover around 3 million people, says Karlan. Pakistan and India are also considering scaling up interventions.

Outside experts are more cautious, but

still impressed, particularly because the work was done as a randomized controlled trial in which people were randomly assigned to either an intervention or a control group, much in the way that drugs and vaccines are tested. Most poverty interventions have failed to show sustainable benefits in such trials, so the effectiveness of the programme justifies countries considering the strategy, says Jonathan Morduch of New York University, who studies micro-finance and poverty.

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Randomized controlled trials to test poverty interventions were developed over the past decade by the Abdul Latif Jameel Poverty Action Lab (J-PAL), at the Massachusetts Institute of Technology in Cambridge (see *Nature* **493**, 462–463; 2013), and Innovations for Poverty Action, a New Haven-based non-profit organization founded by Karlan that coordinated the latest study.

The programme tested in the study uses the 'graduation model', which aims to graduate people out of extreme poverty. It was invented in Dhaka by the Bangladesh Rural Advancement

Committee (BRAC), one of the world's largest non-governmental development organizations. More than 1 billion people in the world live on less than US\$1.25 per day, but the graduation model targets the hundreds of millions who live on less than 70 cents per day. These people are mostly rural women and slum dwellers who are often dependent on aid to survive.

By 2011, BRAC had reached some 400,000 households in Bangladesh, and a 2013 report² of a randomized trial concluded that its programme was highly effective. The latest study tested whether the intervention would work elsewhere. Households were given assets such as goats, sheep or chickens to start farming, or the means to open a shop, and were supported with food, cash, a savings account and access to health care while they were getting their activity up and running. Coaches visited regularly over two years to offer advice — such as how to manage money — and keep people on track.

Overall, one year after the intervention stopped, the experiment had produced a 14% increase in assets and a 96% increase in savings, compared with those in similar groups of people not enrolled in the programme, the paper says. "Effects often fade over time, so seeing results persist for a year is already quite impressive," says Morduch. It shows that a coordinated short-term intervention can put very poor people on the first rung of the ladder to escape from extreme poverty.

NO PANACEA

Although the intervention was successful in Ethiopia, Ghana, India, Pakistan and Peru, it failed in Honduras. There, poor households were mostly given imported chickens, many of which caught local diseases and died. Morduch also worked on another graduation-model study in rural southern India, published in March³, that failed to show any benefits. Residents there turned out not to be keen to become farmers, Morduch says, and most ended up selling the livestock that they were given to take up paid labour.

The intervention is also not cheap. Costs per household ranged from \$1,455 in India to \$5,962 in Pakistan, although they were offset by positive returns on investment ranging from 133% in Ghana to 433% in India. The researchers hope to cut costs in future by scaling back the experiment's more expensive components, such as training.

The graduation model is no cure-all: historically, the biggest reductions in extreme poverty have resulted from larger economic growth, notes Karlan. But trickle-down economic improvements will not end widespread extreme poverty any time soon, he says, so there is a pressing need for bottom-up interventions. ■

1. Banerjee, A. *et al.* *Science* <http://dx.doi.org/10.1126/science.1260799> (2015).
2. Bandiera, O. *et al.* *IZA Discussion Paper No. 7386* (2013); available at <http://go.nature.com/9pedna>
3. Bauchet, J., Morduch, J. & Ravi, S. *J. Dev. Econ.* **116**, 1–16 (2015).