Dry spell dropouts: rainfall and girls' education in Uganda

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Global education advocates are constantly looking for solutions to keep girls in school for longer in developing countries. But could an answer lie in the clouds?

A new paper released this month in the Journal of Development Economics (and summarised here by the Economist) compares 24 years of school attendance records in Uganda with rainfall records.

The research, by Martina Björkman-Nyqvist, finds that household income shocks during times of drought affect girls’ attendance at school, especially for older girls. A 15% decrease in rainfall from its historical mean cuts female enrollment in grade 7 by 5 percentage points. Boys were not affected by rainfall shocks, nor were younger girls. The paper also found that girls’ test scores were more adversely affected during times of low rainfall than those of boys.

The paper concluded that income was a key determinant of educational choices, particularly for girls, and that households appeared to use girls as a buffer for consumption smoothing in periods of negative income shocks (i.e. by using them for domestic work and removing girls from school to reduce household consumption).

The paper suggests that weather insurance or other measures that boost household income during tough times could be useful interventions to promote girls’ education.