

HOUSEHOLD FUEL CHOICE

A penny for your preferences*Ecol. Econ.* **145**, 148–159 (2018)

Fuel wood usage in households in rural China is a significant contributor to global carbon emissions, air pollution and deforestation. Ecosystem services payment programmes attempt to minimize deforestation and modify this fuel choice by paying people to convert cropland to forest or to give up logging rights. Now, Conghe Song and colleagues at the University of North Carolina at Chapel Hill and Qingfeng Huang at Anhui Agricultural University have found that while payments do not significantly affect the households' fuel choice, the overall level of income does.

The researchers surveyed 481 households in an area in rural China where two ecosystem services payment programmes have been implemented, and correlated fuel choice and quantity of fuel wood used with enrolment in the programmes, household income and other surveyed variables. While payments did not seem to have an impact on fuel choice, overall income did positively affect abandonment of fuel wood and above a certain income threshold a small number of households did start using modern fuels (gas and electricity) exclusively. This suggests that while households do climb the energy ladder, that is, they transition stepwise to cleaner fuels, in between they increase their energy consumption by complementing, rather than replacing, fuel wood with modern fuels. If the ecosystem services payment is not sufficient to allow the household to move to a higher socioeconomic strata it will merely serve to enhance income without deterring fuel wood use.

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