

## **Non-farm employment and agricultural mechanisation adoption: A reciprocal relationship**

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### **Electronic supplementary material (ESM)**

Supplementary Table S1

Table S1. First-stage regressions of endogenous variables

Variable	Non-farm employment		Mechanisation adoption	
	pooled OLS	random effects	pooled Probit	RE Probit
<b>Household characteristics</b>				
Head's gender	-0.626*** [0.12]	-0.590*** [0.15]	0.038 [0.04]	0.049 [0.05]
Head's age	-0.033*** [0.00]	-0.035*** [0.00]	0.002* [0.00]	0.003 [0.00]
Head's education	0.084*** [0.01]	0.071*** [0.02]	0.020*** [0.01]	0.020*** [0.01]
Ethnicity	1.371*** [0.13]	1.599*** [0.16]	0.807*** [0.04]	0.869*** [0.05]
Household labour	0.938*** [0.10]	0.930*** [0.04]	-0.004 [0.01]	-0.006 [0.01]
<b>Farm land characteristics</b>				
Farmland	-0.418*** [0.03]	-0.355*** [0.04]	0.053*** [0.01]	0.053*** [0.02]
Number_plot	-0.118*** [0.02]	-0.098*** [0.02]	0.046*** [0.01]	0.048*** [0.01]
Irrigation_condition	0.008*** [0.00]	0.005*** [0.00]	0.005*** [0.00]	0.005*** [0.00]
<b>Social capital</b>				
Credit (log)	-0.011 [0.01]	-0.004 [0.01]	0.035*** [0.01]	0.036*** [0.01]
Extension services	0.856*** [0.17]	0.862*** [0.16]	0.234*** [0.06]	0.234*** [0.07]
FRO-member	0.241** [0.10]	0.151 [0.11]	0.079** [0.04]	0.092** [0.04]
<b>Instrumental variables for mechanisation equation</b>				
Distance to the extension centre	—	—	-0.003** [0.00]	-0.004** [0.00]
Distance to the extension shop	—	—	-0.008*** [0.00]	-0.008*** [0.00]
<b>Instrumental variables for non-farm equation</b>				
Non-farm employment opportunity	0.857*** [0.12]	0.517*** [0.12]	—	—
Distance to the nearest daily market	-0.053*** [0.01]	-0.046*** [0.01]	—	—
Year dummy variables (based 2008)	yes	yes	yes	yes
Constant	-0.449 [0.32]	0.016 [0.37]	-0.887*** [0.12]	-0.912*** [0.13]
Number of observations	8 012	8 012	8 012	8 012
F-test for instruments	43.02	45.92	45.12	40.88

\*\*\*, \*\* and \*significance at 1%, 5% and 10% levels, respectively; values in parentheses indicate standard errors

OLS – Ordinary Least Squares; RE – random effects; FRO – farmer related organisations

Source: Authors' estimation