

The impacts of a community forestry program on forest conditions, management intensity and revenue generation in the Dang district of Nepal

NARAYAN RAJ POUDEL

Graduate School of Asia-Pacific Studies, Waseda University, 1-21-1 Nishi-Waseda, Shinjuku-ku, Tokyo 169-0054, Japan. Email: mnkpoudel@yahoo.com

NOBUHIKO FUWA

Graduate School of Asia-Pacific Studies, Waseda University, 1-21-1 Nishi-Waseda, Shinjuku-ku, Tokyo 169-0054, Japan. Email: nfuwa@waseda.jp

KEIJIRO OTSUKA, Corresponding Authors

National Graduate Institute for Policy Studies, 7-22-1 Roppongi, Minato-ku, Tokyo 106-8677, Japan. Tel: +81-3-6439-6228. Email: Otsuka@grips.ac.jp

Online Appendix

Table A1. *Determinants of the deforestation and volume of mature trees per hectare: OLS estimation*

	Deforestation		Mature tree	
	Sample size = 174	Sample size = 160	Sample size = 174	Sample size = 160
Household density	0.297*** (2.994)	0.293*** (2.826)	-1.796 (-0.325)	-1.445 (-0.275)
Area of forest	-0.106* (-1.854)	-0.104* (-1.685)	2.277 (0.715)	1.187 (0.379)
Distance to road	-0.029 (-1.144)	-0.016 (-0.587)	1.835 (1.313)	2.764* (1.941)
Distance to village	0.055 (0.254)	-0.02 (-0.085)	-12.6 (-1.038)	-15.151 (-1.289)
Year latest OP	-0.026 (-0.361)	-0.038 (-0.484)	3.671 (0.901)	5.055 (1.274)
Year of handover	-0.047 (-0.856)	-0.03 (-0.483)	1.062 (0.348)	0.263 (0.085)
Slope of forest		-0.029 (-1.447)		-0.984 (-0.966)
Constant	147.933 (0.864)	136.717 (0.74)	-9374.91 (-0.982)	-1.06E+04 (-1.126)
F	4.28	3.68	0.76	1.04
R-squared	0.13	0.15	0.03	0.05

Notes: *, **, and *** indicate statistical significance at 0.1, 0.05, and 0.01 level, respectively. T-statistics are shown in parentheses.

Table A2. *Determinants of management operation and revenue: OLS estimation*

	Management		Revenue	
	Sample size = 179	Sample size = 165	Sample size = 179	Sample size = 165
Household density	9.623*** (6.762)	9.860*** (6.596)	906.819*** (4.484)	800.849*** (3.812)
Area of forest	-2.681*** (-3.421)	-2.472*** (-2.940)	32.961 (0.296)	14.307 (0.121)
Distance to road	-0.448 (-1.270)	-0.556 (-1.439)	-11.353 (-0.226)	29.012 (0.534)
Distance to village	2.966 (1.024)	2.447 (0.799)	-510.258 (-1.240)	-690.282 (-1.603)
Year latest OP	-0.368 (-0.378)	-0.523 (-0.508)	-61.634 (-0.445)	-75.73 (-0.523)
Education 1 of president	-2.052 (-0.488)	-0.23 (-0.051)	-1015.291* (-1.697)	-1380.575** (-2.174)
Education 2 of president	3.335 (0.47)	5.741 (0.744)	-390.138 (-0.387)	-562.143 (-0.519)
Female president dummy	3.687 (0.577)	4.001 (0.585)	1761.773* (1.938)	1853.610* (1.928)
Age of the president	-0.403* (-1.886)	-0.32 (-1.342)	-91.942*** (-3.030)	-96.497*** (-2.879)
Year of handover	-0.346 (-0.466)	-0.174 (-0.213)	98.173 (0.932)	127.788 (1.118)
Slope of forest		0.254 (0.925)		-103.327*** (-2.675)
Constant	1479.649 (0.625)	1439.924 (0.569)	-6.74E+04 (-0.200)	-9.65E+04 (-0.271)
F	10.17	8.18	4.54	4.60
R-squared	0.38	0.37	0.21	0.25

Notes: *, **, and *** indicate statistical significance at 0.1, 0.05, and 0.01 level, respectively. *T*-statistics are shown in parentheses.

Education 1 and 2 refer to secondary and tertiary education, respectively.

Table A3. *Determinants of the number of small trees and pole tree per hectare: OLS estimation*

	Small tree		Pole tree	
	Sample size= 189	Sample size= 173	Sample size = 189	Sample size = 173
Household density	-691.315* (-1.834)	-703.526* (-1.774)	-20.479 (-0.791)	-22.165 (-0.821)
Area of forest	-517.929** (-2.147)	-494.466* (-1.856)	-20.8 (-1.255)	-22.843 (-1.260)
Distance to road	-393.075*** (-3.659)	-439.868*** (-3.658)	12.829* (1.738)	11.864 (1.449)
Distance to village	-581.746 (-0.617)	-565.266 (-0.560)	72.986 (1.127)	66.717 (0.97)
Year latest OP	798.192** (2.56)	772.755** (2.32)	40.164* (1.875)	38.917* (1.716)
Year of handover	168.281 (0.75)	230.05 (0.923)	-1.712 (-0.111)	-5.636 (-0.332)
Slope of forest		47.254 (0.549)		2.48 (0.423)
Constant	-1.92e+06*** (-2.628)	-1.99e+06** (-2.521)	-7.63E+04 (-1.520)	-6.60E+04 (-1.226)
F	3.74	3.04	2.00	1.51
R-squared	0.11	0.11	0.06	0.06

Notes: *, **, and *** indicate statistical significance at 0.1, 0.05, and 0.01 level, respectively. T-statistics are shown in parentheses.