

# Fungal gold and firewood on the Tibetan plateau: examining access to diverse ecosystem provisioning services within a rural community

EMILY WOODHOUSE, PHILIP MCGOWAN and E.J. MILNER-GULLAND

TABLE S1 Response and explanatory variables used in statistical analyses.

Name of variable	Description	Type (units)	Reference
<b>Response variables</b>			
Caterpillar fungus amount	Amount of caterpillar fungus collected in 2009	Continuous (pieces)	
Matsutake amount	Amount of matsutake mushrooms collected in 2009	Continuous (kg)	
Firewood	Amount of firewood collected in 2009	Count data (tractor loads)	
Caterpillar fungus price	Mean price received for caterpillar fungus per piece in 2009	Continuous (USD per piece)	
<b>Explanatory variables</b>			
Age	Age of household head	Continuous (years)	McElwee (2008), McSweeney (2004)
Alternative work	Alternative occupation other than farming or herding	2 level factor (yes, no)	McElwee (2008), Kamanga et al. (2009)
Dependency	Dependency ratio (100 x number of dependants per number of productive adults) <sup>1</sup>	3 level factor (low, medium, high)	Walker (2003)
Education	Education of any member of the household >16 years	2 level factor (yes, no)	Godoy et al. (1998), Uberhuaga et al. (2012)
Herding	Herds livestock as a source of livelihood	2 level factor (yes, no)	Olsen & Larsen (2003)
Household size	Household size	Continuous (1–9 persons)	Olsen & Larsen (2003), Mamo et al. (2007)
Income	Annual cash income in 2009	Continuous (USD)	Cavendish (2000), Uberhuaga et al. (2012)
Land	Amount of land owned by the household	Continuous (Mu) <sup>2</sup>	Olsen & Larsen (2003)
Village	Village of residence	Categorical (1–4)	Rayamajhi et al. (2012)
Wealth	Wealth according to local understanding	3 level factor (poor, middle, wealthy)	de Merode et al. (2004)

<sup>1</sup>Dependants are defined as children under the age of 15, and elderly and disabled family members not able to carry out productive work. This does not take into account gradations of productivity.

<sup>2</sup>1 Mu  $\approx$  670 m<sup>2</sup>

TABLE S2 Model selection table for GLM of the amount of firewood collected in 2009.

Herding	Household size	Income	Village	% deviance explained	AICc <sup>1</sup>	Delta <sup>2</sup>	Weight
	+			15.6	163.9	0	0.238
		+		11.3	165.0	1.082	0.138
	+	+		19.1	165.3	1.364	0.12
				0.0	165.7	1.772	0.098
+	+			16.9	165.9	1.949	0.090
	+		+	32.4	166.8	2.867	0.057
+		+		11.3	167.3	3.351	0.044
+	+	+		20.5	167.3	3.391	0.044
			+	20.3	167.4	3.445	0.042
+				0.8	167.7	3.738	0.037
		+	+	27.6	168.0	4.076	0.031

+ indicates where variables are included in the model

<sup>1</sup>AICc is AIC (indicating the relative goodness of fits of a model) with a correction that makes a greater penalty for extra parameters. It is recommended by Burnham & Anderson (2002) when n is relatively small.

<sup>2</sup>Measures the model relative to the best model

TABLE S3 Model selection table for GLM of the amount of caterpillar fungus collected in 2009.

Age	Depen- dency	Educ- ation	Herding	House- hold size	Land	Altern- ative work	Herding : household size	% deviance explained	AICc <sup>1</sup>	Delta <sup>2</sup>	Weight
-0.1944	+		+	3.26			+	40.1	326.1	0	0.18
-0.1887	+		+	3.26		+	+	40.6	328.7	2.557	0.05
-0.189	+		+	3.405	0.1725		+	40.6	328.8	2.623	0.048
-0.1929	+	+	+	3.265			+	40.2	329.1	2.937	0.041
	+		+	3.096			+	32.4	329.3	3.18	0.037
-0.1855	+			1.662				28.7	329.3	3.209	0.036
-0.1745	+			1.806		+		31.7	329.8	3.711	0.028

+ indicates where variables are included in the model

<sup>1</sup>AICc is AIC (indicating the relative goodness of fits of a model) with a correction that makes a greater penalty for extra parameters. It is recommended by Burnham & Anderson (2002) when n is relatively small.

<sup>2</sup>Measures the model relative to the best model

SUPPLEMENTARY TABLE S4 Model selection table for GLM of the price received for caterpillar fungus in 2009.

Dependency	Education	Herding	Household size	Village	% deviance explained	AICc <sup>1</sup>	Delta <sup>2</sup>	Weight
	+		+		23.5	56.02	0	0.272
	+	+	+		26.1	56.77	0.743	0.187
		+	+	+	30.8	58.77	2.743	0.069
			+		15.1	58.89	2.864	0.065
		+	+		18.8	59.02	2.993	0.061

+ indicates where variables are included in the model

<sup>1</sup>AICc is AIC (indicating the relative goodness of fits of a model) with a correction that makes a greater penalty for extra parameters. It is recommended by Burnham & Anderson (2002) when n is relatively small.

<sup>2</sup>Measures the model relative to the best model