## **Appendix 1.** Control villages for NESP survey 2017.

## Summary

**Table A1.1.** List of control villages for each HD based on variables used in matching: (a) B1 (primary biophysical variables), (b) B1 & B2 (both primary and secondary biophysical variables), (c) B1 & P1 (primary biophysical and basic human wellbeing variables), (d) B1, B2 & P1 (biophysical and basic human wellbeing variables), and (e) B1, B2, P1 & P2 (biophysical, basic human wellbeing and infrastructure variables) (see Table 2 for baseline variables B1, B2, P1 & P2). Cell highlighted in orange represents the eligible control based on matching variables for column (b)-(e). Cell highlighted in red represents the most suitable control village (closest match to HD), and cell highlighted in blue represents the second most suitable control village. *The final control was selected minimizing column (b) or (c)*.

Kab. (District)	Hutan Desa (HD)	Kecamatan	Control village candidates,	Similarity to HD			
			based on ‡	(smaller value indicates closer match)			
			(a)	(b)	(c)	(d)	(e)
			B1 (with X denotes the final	B1 &	B1 &	B1, B2 &	B1, B2, P1
			selected control)	B2	P1	P1	& P2
Ketapang	Laman	Sandai	Sandai (M, HPK)	4.33	2.58	5.04	
	Satong (M, HPK)	Simpang Hulu	Balai Pinang (M,HPK)	3.89	0.60	3.94	
		Nanga Tayap	Kayong Utara (M,HP) X	3.26	0.04	3.26	
		Sandai	Merimbang Jaya (M,HP)	3.54	1.95	4.04	6.94
		Simpang Dua	Semandang Kanan (M,HP)	4.19	3.55	5.49	5.62
		Simpang Hulu	Paoh Concong (M,HP)	3.09	1.92	3.64	3.74
		Simpang Hulu	Semandang Kiri (M,HP)	3.10	2.01	3.70	3.86
		Sungai Melayu Rayak	Sei Melayu (M,HP)	4.76	3.72	6.05	6.41
		Sungai Melayu Rayak	Suka Mulya (M,HP)	6.19	2.06	6.52	6.59
		Tumbang Titi	Mahawa (M,HP)	2.26	3.50	4.16	4.77
		Tumbang Titi	Nanga Kelampai (M,HP)	5.03	3.27	6.00	6.49
	Pematang	Manis Mata	Suka Ramai (P,HPK)	2.81	1.97	3.44	3.64
	Gadung (P, HPK)	Air Upas	Air Durian Jaya (P,HP)	2.32	1.98	3.05	3.13
		Kendawangan	Air Tarap (P,HP)	3.07	2.69	4.08	6.40
		Kendawangan	Suka Damai (P,HP)	2.15	1.96	2.91	2.93
		Nanga Tayap	Sungai Kelik (P,HP) X	1.55	3.37	3.71	3.72
		Simpang Hulu	Kualan Hilir (P,HP)	4.59	3.84	5.99	6.73
		Singkup	Pantai Ketikal (P,HP)	2.16	2.61	3.39	3.58
Kapuas	Мепиа	Badau	Badau (M,HPT)	4.47	3.13	5.68	6.20
Hulu	Sadap (M, HPT)	Boyan Tanjung	Boyan Tanjung (M,HPT)	5.35	4.45	7.12	8.34
		Hulu Gurung	Kelakar (M,HPT) X	2.84	3.50	4.39	5.16
		Hulu Gurung	Nanga Tepuai (M,HPT)	4.41	3.92	5.99	6.48
		Pengkadan	Riam Panjang (M,HPT) X	2.63	3.13	4.00	4.38
	Nanga Lauk	Embaloh Hulu	Pulau Manak (P,HL) <b>X</b>	2.99	1.05	3.46	4.84
	(P, HL)	Embaloh Hulu	Tamao (P,HL)	2.59	3.22	4.01	4.59
		Putussibau Utara	Nanga Awin (P,HL)	3.55	1.17	4.09	5.74
		Putussibau Utara	Nanga Nyabau (P,HL) X	4.33	3.56	5.74	6.10

<sup>‡</sup> HL = Hutan Lindung (Watershed protection forest), HPT = Hutan Produksi Teerbatas (Limited production forest), HP = Hutan Produksi Tetap (Permanent production forest), HPK = Hutan Produksi Konversi (Convertible production forest). M = Mineral soil, P = Peat soil.

## Methodology

**Table A1.2.** List of baseline variables used in matching: (a) B1 (primary biophysical variables), (b) B2 (secondary biophysical variables), (c) P1 (basic human wellbeing variables), and (d) P2 (infrastructure variables).

Aspect to match	Description	PODES‡ variable	Response	
Biophysical -	Location	Location on peat	Binary	
Primary (B1)		Forest functional zone	Categorical (HL, HPT, HP/HPK)	
Biophysical -	Anthropogenic pressure	Forest area	Continuous	
Secondary (B2)		Forest loss (2005-2015)	Continuous	
		Elevation	Continuous	
		Slope	Continuous	
		Distance to cities and major roads	Continuous	
Poverty -Basic human wellbeing	Living conditions	Proportions of families living in poor housing conditions or slums	Continuous	
(P1)		Households with electricity	Continuous	
		Energy for cooking for the majority of households	Categorical (1=natural gas/electricity, 2=kerosene, 3=others)	
		Toilet facilities for the majority of households	Categorical (1=own toilet, 2=joint toilet, 3=public toilet, 4=non-toilet)	
		Children malnutrition incidence in the last year	Continuous	
Poverty -	Access to health, knowledge,	Distance to the nearest health facility	Continuous	
Infrastructure		Distance to nearest elementary school	Continuous	
( <b>P2</b> )	infrastructure and	Number of elementary schools nearby	Continuous	
	services	Distance to nearest secondary school	Continuous	

<sup>‡</sup> PODES is the Pendataan Potensi Desa or Village Potential Statistics from the Bureau of Statistics/Badan Pusat Statistik of the Republic of Indonesia. This statistical matching used data from the 2014 survey, for which the report is available online, but the data is not open access

(https://www.bps.go.id/publication/2014/12/16/7107f6b0f1a6f3e4619a2e0e/statistik-potensi-desa-indonesia-2014.html)