

SUPPLEMENTARY MATERIAL

THE STRUCTURE OF RELIGION, ETHNICITY, AND INSURGENT MOBILIZATION

Evidence from India

By Anoop Sarbahi
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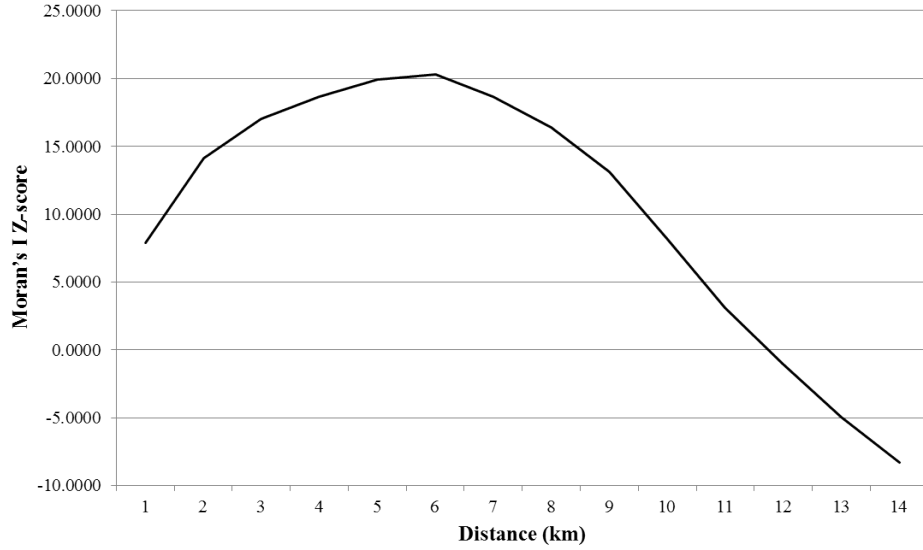
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Figure A-1: Global Moran's I with Varying Radius



Notes: The Moran's I statistics is calculated using the following equation:

$$I = \frac{n}{S_0} \frac{\sum_{i=1}^n \sum_{j=1}^n w_{i,j} z_i z_j}{\sum_{i=1}^n z_i^2} \quad (\text{A-6})$$

where z_i is the deviation of an attribute for feature i from its mean ($x_i - \bar{X}$), $w_{i,j}$ is the spatial weight between village i and j , n is equal to the total number of villages, and S_0 is the aggregate of all the spatial weights:

$$S_0 = \sum_{i=1}^n \sum_{j=1}^n w_{i,j} \quad (\text{A-7})$$

The z_I -score for the statistics calculated as:

$$z_I = \frac{I - E[I]}{\sqrt{V[I]}} \quad (\text{A-8})$$

where

$$E[I] = -1/(n - 1) \quad (\text{A-9})$$

$$V[I] = E[I^2] - E[I]^2 \quad (\text{A-10})$$

Figure A-2: Growth of Christianity & Literacy in Mizoram, 1901–1961

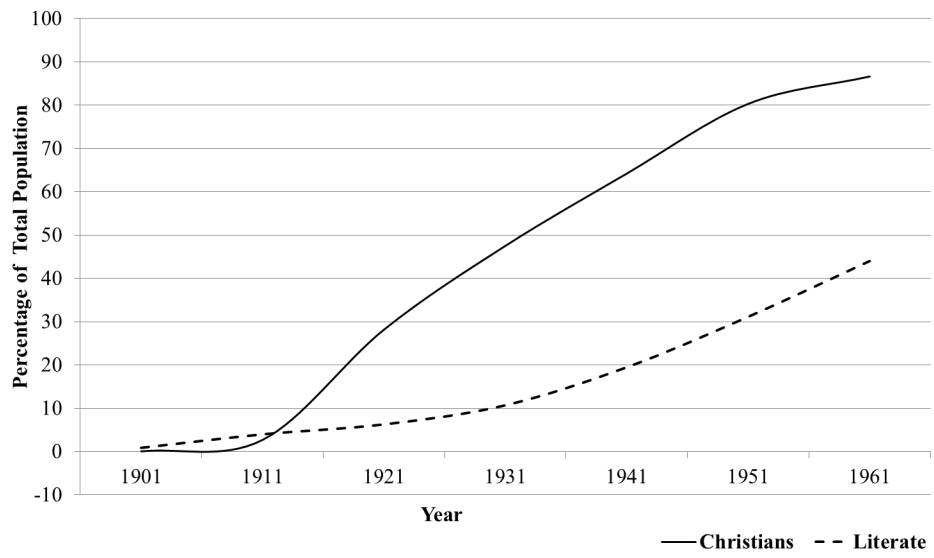
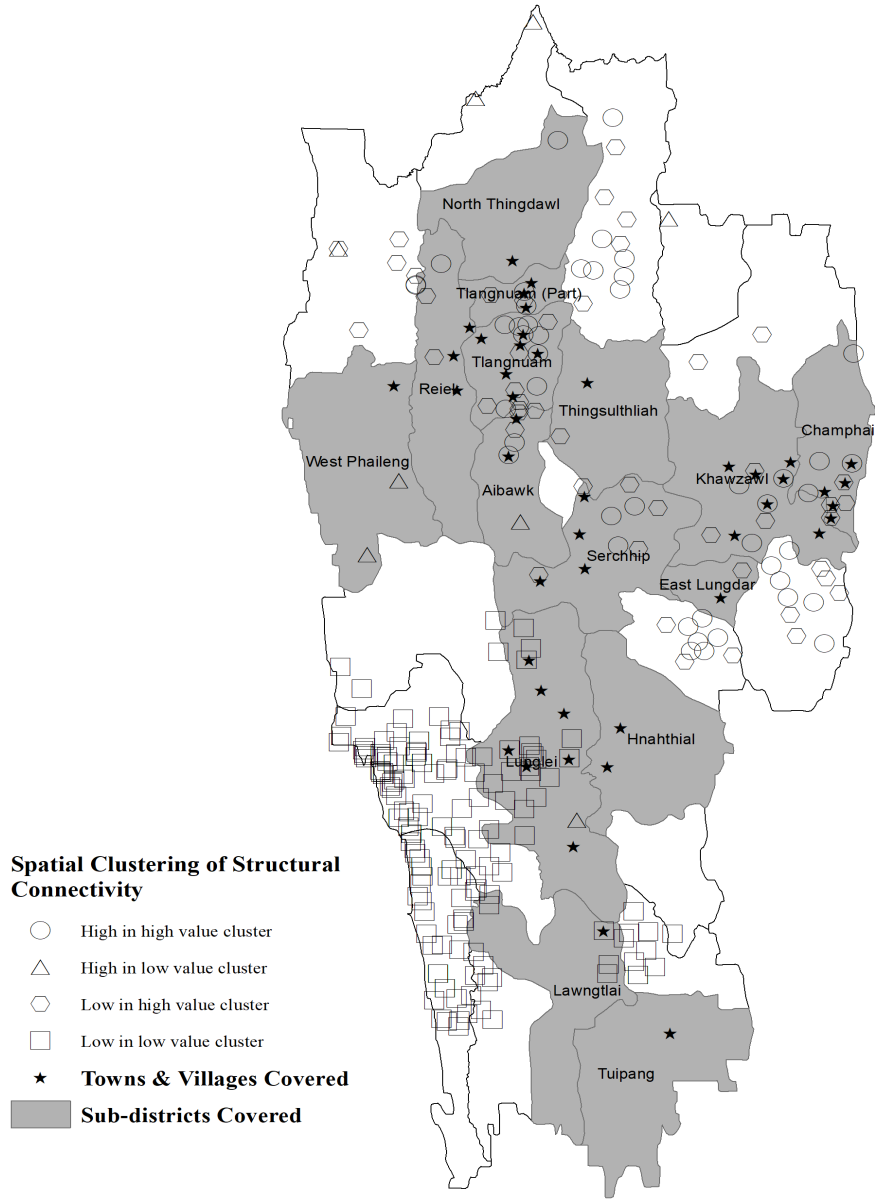


Figure A-3: Spatial Distribution of Interviews



A-1 A Note on ‘Revivals’ in Mizoram

The spread of Christianity is associated with four ‘waves’ of ‘revival’ or *harhna* – increased spirituality and interest in Christianity among the Mizos – during the first three decades of the last century (Lalsawma 1994). These waves were characterized by intensified activities within and around certain Mizo villages that lasted for days, weeks and even months (Hminga 1987). The mobilization associated with ‘revival’ was so intense that the British administration feared potential subversion (Reid 1942, 47). Stories of revival suggest the role of spontaneous actions by villagers, often resulting from personal tragedies, sickness, dreams and visions, sparking major revival activities (see Hminga 1987; Lalsawma 1994). Here is an account of one such revival from Lalsawma (1994): “Dara and his wife took a trip to Tuisen village (Khawzawl)...One night when he went to attend the church service there, he turned aside before entering, apparently to pray. When he was not seen during the service they searched and found him dead...His body was brought back to his village and buried...As was the custom, village people congregated every following night, holding the wake on Dara’s death, singing songs and offering prayers. The gathering moved into excited singing...this was the beginning of the outbreak of revival” (57). These accounts and other available information do not suggest that certain villages were selectively targeted for revival activities based on certain pre-existing characteristics or a pre-defined plan. While the entire territory was subject to Christian missionary activities, only a handful of villages experienced revival. However, in the absence of systematic information about these episodes, we cannot claim with certainty that they were entirely random.

A-2 Control Variables

A-2.1 Key Alternative Explanations

(a) **The Great Famine** The launch of the rebellion is widely associated with the famine of 1959 (Ray 1982). The poor response of the Indian state was aggressively used by the MNF to mobilize the Mizo population. The MNF originally emerged as the Mizo National Famine Front (MNFF) to mobilize relief for famine-affected people. The famine of 1959 was triggered by the mass flowering (masting) of *Melocanna baccifera*, or *mautak* bamboo, and varied in its severity across the territory with the distribution of this species. *Melocanna baccifera*, a semelparous species, flowers with remarkable regularity and synchronicity approximately every 48 years. It reproduces *en masse* once in its life-span, bears large quantities of fruits and dies. The process results in a rapid increase in rat population that feed on the bamboo fruits. This increased population next targets standing crops and granaries resulting in famine. The previously-recorded famines linked to *Melocanna baccifera* took place in 1863 and 1911 (Mackenzie 1884; Reid 1942).¹

¹For an excellent account of the phenomenon, see the 2011 PBS NOVA documentary, *Rat Attack*.

I use the distribution of *Melocanna baccifera* as a proxy for famine. The data is for the year 2006 and is extracted from a high-resolution thematic map of bamboo distribution prepared by the Mizoram Remote Sensing Agency (MIRSAC). I use the ratio of total pixels occupied by *Melocanna baccifera* to the total number of pixels within a 5 km radius of a village. Unfortunately, this is the latest available micro-level data on bamboo distribution. A reasonable concern is whether the spatial distribution of *Melocanna baccifera* has changed significantly since the 1950s to affect the findings. As I argue in section A-3, this is unlikely.

(b) Mobilization During World War II During the Second World War, the prospect of a Japanese invasion of India via Burma meant a bigger involvement of locals in the British war effort. There were close to 3,000 Mizos enlisted in the British India Army during the war. Thousands of others were enlisted as porters, couriers, spies, construction workers and volunteers. Exposure to military training and combat may impact the likelihood of these men's, or their community's, participation in rebellion (Jha and Wilkinson 2012). Some Southeast Asian scholars have attributed the prevalence of multiple ethnic insurgencies in the region to military mobilization associated with the Second World War (see Taylor 1987). This argument finds some support in the fact that a number of initial recruits in the MNF had a military background. For instance, both Laldenga and Manliana, founding members of the MNF, fought during the Second World War.

To examine the effect of the Second World War, I use the data on Mizos serving in the British India Army during this war. This data is from the records preserved in the state archives and is available at the village level. There were 2,847 individuals, recruited from 270 villages, in the British India Army from the territory. Of these, I was able to identify and geocode the native villages of 2,778 recruits. This measure is the number of recruits per unit village population in 1951.

A-2.2 Other Controls

(a) Material Incentives: I use forest resources as measured in terms of the tree volume per unit area as a measure of material incentives. Royalty on forest produce was an important source of income for the MNF. The data – measured as tree volume in cubic meters per hectare – is provided by the Forest Department of Mizoram and is based on a forest survey done between 1988 and 1989. This is the earliest available forest resource data. Since the overall forest cover has not changed significantly in the state since the 1960s, I expect the data to have a very high correlation with the forest resources in the 1960s. Moreover, the data is available only at the level of forest divisions.

(b) Economic Conditions: I use three measures of economic conditions: 1) the proportion of the village population employed in the manufacturing and service sectors; 2) an index of village prosperity based on village facilities; and 3) area under *kharif* or winter crop, which is wet rice cultivation in the case of Mizoram and is different from the area under widely-practiced shifting cultivation. The data for the first two measures is from the 1961 census. The index of village prosperity is generated using principal component analysis (PCA) of facilities located in a village. The PCA included binary variables

marking the presence of the following: a) dispensary; b) hospital; c) veterinary facilities; d) post office; e) village road; f) high school; g) middle school; h) primary school; i) river water; j) tank water; k) piped water; l) weekly market; and, m) daily market.

The information on the area under winter crop is for the year 2005 and from NRSC (2006). This is the earliest available high-resolution land-use data. I expect this area to correlate very highly with the area under rice cultivation in the 1960s. The state is highly mountainous. There are only a few areas within the state, especially in the mid-eastern parts of the state, where rice cultivation can be practiced. The high value attached to these areas and the lack of population pressure on land in much of the state means that we should not expect the area under rice cultivation to change significantly since the 1960s.

(c) State Capacity: Two proxies for the state capacity or presence are used in the analysis. These are the distance to the nearest post office and the distance to the nearest Assam Rifle post, the main counter-insurgent force in the region, or a police station. The data on the location of post offices is from the 1961 Census of India. The information on the location of the Assam Rifles posts is from Hluna and Tochwawng (2012).

(d) Remoteness & Terrain: I use three measures of remoteness and inhospitable terrain: a) minimum distance to an international border – the India-Bangladesh or India-Myanmar border; b) mean elevation of area within a five kilometer radius of the village; and, c) distance to a ‘motorable’ or asphalt road in 1961. The elevation data is from the United States Geological Survey’s Global 30 Arc-Second Elevation Data Set (GTOPO30), a global digital elevation model (DEM) with a horizontal grid spacing of 30 arc seconds, which is approximately 1 kilometer. The third measure is based on the road network map from the 1961 Census of India.

(e) Education: I use literacy rate – the ability to read and write in native language – in a village as a measure of education. This figure includes individuals who have received formal education. The data is from the 1961 Census of India

A-3 Concerns about Changes in the Spatial Distribution of *Melocanna baccifera*

A reasonable concern is whether the spatial distribution of *Melocanna baccifera* has changed significantly since the 1950s to affect the findings. The distribution of bamboo is likely to be adversely affected by the growth of population. However, given the hardy and invasive nature of the species, the effect of population growth and increased anthropomorphic activities on bamboo distribution is not unidirectional. In areas where increased human population translates to an increased urban built-up area, population growth should lead to a decline in bamboo acreage. Bamboo acreage is likely to increase in areas where an increase in human activities results in the clearing of original forest cover, but not in significant concrete built up. In such locations, recently-exposed land provides a suitable ground for the emergence of invasive bamboo culms. Based on the history of demographic and land-use changes in Mizoram, the former scenario is more likely to emerge close to urban towns while the latter is more likely to result from the expansion and multiplication of villages in rural areas.

I believe that we need to be more concerned about the decline in bamboo acreage as a result of urban ‘built-up’ than by an increase resulting from the destruction of original forest cover. In view of the small size and the layout of most Mizo villages (along the ridges), while we may expect bamboo acreage to increase, we should not expect the acreage to be drastically altered around villages, especially since we are looking at the distribution of *Melocanna baccifera* within a relatively large radius of five kilometers. Most of the Mizo villages do not extend beyond a few hundred meters. It is also important to remember that *Melocanna baccifera* grows only under particular ecological or agro-climatic conditions, which have not changed. For instance, the western part of the state is devoid of *Melocanna baccifera* because of its higher elevation (see Figure 5 in Section 4). Moreover, the area under forest cover in the territory, which is currently over 91 percent of the total area, has not changed significantly since the 1960s (Government of India 2013). However, the decline in bamboo acreage could be significant in towns, which have experienced significant population growth and resulting urban ‘built-up’. Fortunately, there are only seven towns in the territory, and the bulk of the increase has taken place in the state capital, Aizawl, where the population has quadrupled in the last three decades. Aizawl is now home to 27 percent of Mizoram’s population and 51 percent of its urban population.

One concern is that the mass displacement of the population during the late 1960s, as part of the ‘village grouping’ scheme to counter insurgents, would lead to an increase in bamboo acreage. This concern is unwarranted since village grouping lasted only until 1971 and people were allowed to return to their native villages.

Table A-1: Summary Statistics

Variable	Mean	Standard Deviation	Minimum	Maximum
Recruits per unit population	0.006	0.010	0.000	0.105
Proportion YMA members	0.055	0.114	0.000	0.784
YMA branch (dummy)	0.237	0.425	0.000	1.000
Church	0.713	0.453	0.000	1.000
Church & YMA branch (dummy)	0.235	0.424	0.000	1.000
Distance to the nearest revival village	15.040	13.260	0.000	66.307
Structural connectivity index	0.002	1.353	-3.657	3.775
Proportion bamboo area	0.161	0.148	0.000	1.000
Proportion WW II recruits	0.008	0.018	0.000	0.252
Village prosperity index	0.317	0.137	0.152	2.000
Proportion in manufacturing & services	0.034	0.065	0.000	0.641
Area under paddy fields	3.728	4.254	0.000	34.030
Proportion literate (PL)	0.369	0.192	0.000	0.865
Forest resources	0.292	0.129	0.120	0.524
Mean Elevation (log)	6.104	0.762	4.378	7.238
Distance to road	14.543	11.183	0.003	44.038
Distance to the nearest village	2.621	1.847	0.000	9.165
Distance to border	23.983	17.765	0.006	75.940
Distance to security post	14.236	8.791	0.000	42.447
Distance to post office	12.246	8.987	0.000	42.213
Observations	689			

All distances in kilometers. Forest resources are per meter² area.

Table A-2: Correlation Matrix of Explanatory Variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
(1) Proportion YMA members	1.000																		
(2) YMA branch (dummy)	0.868	1.000																	
(3) Church	0.285	0.346	1.000																
(4) Church & YMA branch (dummy)	0.848	0.996	0.352	1.000															
(5) Distance to the nearest revival village	-0.310	-0.351	-0.619	-0.350	1.000														
(6) Structural connectivity index	0.611	0.615	0.848	0.610	-0.859	1.000													
(7) Proportion bamboo area	0.029	-0.009	0.110	-0.013	-0.146	0.129	1.000												
(8) Proportion WW II recruits	0.320	0.385	0.298	0.388	-0.349	0.408	0.046	1.000											
(9) Forest resources	-0.110	-0.127	-0.199	-0.126	0.425	-0.328	-0.005	-0.101	1.000										
(10) Village prosperity index	-0.003	0.067	0.016	0.067	-0.075	0.042	-0.057	0.078	-0.122	1.000									
(11) Proportion in manufacturing & services	-0.010	0.025	0.048	0.027	-0.134	0.082	0.011	0.026	0.036	0.310	1.000								
(12) Area under paddy fields	0.048	-0.002	-0.061	-0.026	0.001	-0.012	-0.101	-0.040	-0.141	0.061	0.011	1.000	-0.049	1.000					
(13) Proportion literate (PL)	0.298	0.327	0.627	0.325	-0.626	0.684	0.197	0.343	-0.164	0.028	0.192	-0.049	1.000	-0.049					
(14) Mean Elevation (log)	0.222	0.249	0.504	0.254	-0.455	0.521	-0.023	0.300	0.085	-0.148	0.134	-0.099	0.492	-0.099	1.000				
(15) Distance to road	-0.093	-0.093	-0.221	-0.092	0.422	-0.331	-0.164	-0.187	0.246	-0.095	-0.264	-0.039	-0.324	-0.039	-0.188	1.000			
(16) Distance to the nearest village	0.072	0.144	0.231	0.149	-0.004	0.133	-0.017	0.010	0.136	-0.175	-0.046	-0.255	0.161	-0.255	0.255	0.163	1.000		
(17) Distance to border	0.247	0.298	0.431	0.294	-0.579	0.554	0.417	0.256	-0.154	0.051	0.182	-0.034	0.569	-0.034	0.141	-0.397	0.070	1.000	
(18) Distance to security post	-0.003	0.010	0.151	0.012	-0.051	0.093	0.180	-0.109	-0.096	-0.134	-0.200	-0.083	0.094	-0.083	-0.033	0.452	0.178	0.061	1.000
(19) Distance to post office	-0.223	-0.251	-0.366	-0.251	0.503	-0.480	-0.150	-0.223	0.244	-0.001	-0.199	-0.061	-0.435	-0.061	-0.472	0.520	0.047	-0.424	0.074

All distances in kilometers.

Table A-3: Regression Estimates of Rebel Recruitment: Bivariate Estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	14	15	16	17	18	19		
Proportion YMA members	1.478*** (0.463)																				
YMA branch (dummy)		0.473*** (0.136)																			
Church			1.552*** (0.476)																		
Church & YMA branch (dummy)				0.479*** (0.136)																	
Distance to the nearest revival village					-0.0533** (0.0224)																
Structural connectivity index						0.560*** (0.134)															
Proportion bamboo area							-0.322 (0.598)														
Proportion WW II recruits								5.424*** (2.054)													
Forest resources									2.622 (1.672)												
Village prosperity index										0.0723 (0.349)											
Proportion in manufacturing & services											0.165 (0.870)										
Area under paddy fields												-0.04890** (0.0193)									
Proportion literate (PL)													2.022** (0.869)								
Mean Elevation (log)														0.861** (0.384)							
Distance to road															-0.0140 (0.0102)						
Distance to the nearest village																0.100*** (0.0342)					
Distance to border																	0.0239** (0.0121)				
Distance to security post																		-0.00579 (0.00641)			
Distance to post office																				-0.0154 (0.0165)	
Spatial Lag	22.41 (11.61)	24.46** (11.81)	20.87 (12.01)	24.60** (11.81)	10.24 (16.62)	18.44 (12.19)	20.67 (11.96)	21.37 (11.90)	20.04 (12.06)	20.75 (11.88)	20.66 (11.98)	19.90 (11.66)	19.51 (11.35)	11.50 (14.65)	19.72 (11.81)	24.94** (11.23)	15.80 (12.49)	20.20 (12.06)	19.21 (12.06)		
Constant	-7.534*** (0.00116)	-7.534*** (0.00119)	-7.696*** (0.0902)	-7.534*** (0.00119)	-4.911*** (1.075)	-5.982*** (0.353)	-7.479*** (0.0990)	-7.534*** (0.00119)	-8.908*** (0.876)	-7.549*** (0.0718)	-7.544*** (0.6580)	-7.452*** (0.0303)	-7.977*** (0.199)	-13.32*** (2.604)	-7.185*** (0.250)	-7.492*** (0.143)	-7.752*** (0.115)	-7.466*** (0.0740)	-7.427*** (0.112)		
Observations	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	
AIC	45.96	45.94	45.62	45.94	43.79	43.50	44.08	46.04	44.03	46.08	46.08	45.97	43.81	43.85	46.05	43.97	43.97	46.08	44.06		
BIC	59.57	59.55	59.23	59.54	52.86	52.57	53.15	59.65	53.10	59.69	59.69	59.57	52.89	52.92	59.66	53.04	53.05	59.68	53.13		

Robust standard errors in parentheses, clustered at administrative subdistrict level (level 4).

All estimates include administrative block (level 4) fixed effects. All distances in kilometers.

* p<0.10, ** p<0.05, *** p<0.001

Table A-4: Regression Estimates of Rebel Recruitment: Alternative Measures of Structural Connectivity

	Rebels per unit population					
	(1)	(2)	(3)	(4)	(5)	(6)
Structural connectivity						
Proportion YMA members	1.307** (0.531)					
YMA branch (dummy)		0.366** (0.151)				
Church (dummy)			1.062** (0.445)			
Church & YMA branch (dummy)				0.368** (0.151)		
Distance to the nearest revival village					-0.036** (0.018)	
Structural connectivity index						0.436*** (0.120)
Key competing explanations						
Proportion bamboo area	-0.863 (0.585)	-0.774 (0.569)	-0.751 (0.607)	-0.772 (0.570)	-0.851 (0.523)	-0.891 (0.573)
Proportion WW II recruits	1.516 (3.229)	1.305 (3.204)	2.096 (3.165)	1.295 (3.199)	2.572 (3.329)	0.686 (3.314)
Economic conditions						
Village prosperity index	0.039 (0.388)	-0.028 (0.376)	0.074 (0.346)	-0.029 (0.376)	0.065 (0.348)	0.010 (0.358)
Proportion in manufacturing & services	-0.123 (0.885)	-0.184 (0.895)	-0.231 (0.952)	-0.185 (0.895)	-0.571 (0.806)	-0.113 (0.908)
Area under paddy fields	-0.037 (0.019)	-0.036 (0.020)	-0.039** (0.019)	-0.036 (0.020)	-0.032 (0.020)	-0.033 (0.019)
Education						
Proportion literate (PL)	1.300 (0.735)	1.341 (0.723)	0.985 (0.729)	1.342 (0.722)	1.263 (0.766)	1.028 (0.752)
Material incentive						
Forest resources	1.430 (1.041)	1.421 (1.022)	1.492 (0.869)	1.427 (1.022)	1.122 (1.078)	1.378 (0.977)
Remoteness & terrain						
Mean elevation (log)	0.573 (0.388)	0.578 (0.390)	0.453 (0.384)	0.577 (0.390)	0.395 (0.320)	0.393 (0.376)
Distance to road	-0.009 (0.011)	-0.009 (0.011)	-0.006 (0.010)	-0.009 (0.011)	-0.003 (0.009)	-0.003 (0.009)
Distance to the nearest village	0.094** (0.038)	0.087** (0.039)	0.075 (0.043)	0.088** (0.039)	0.109*** (0.037)	0.094** (0.038)
Distance to border	0.023 (0.012)	0.022 (0.012)	0.018 (0.011)	0.022 (0.012)	0.018 (0.011)	0.017 (0.012)
State capacity						
Distance to security post	-0.002 (0.009)	-0.003 (0.009)	-0.005 (0.009)	-0.003 (0.009)	-0.003 (0.009)	-0.004 (0.009)
Distance to post office	-0.015 (0.015)	-0.013 (0.015)	-0.014 (0.016)	-0.013 (0.015)	-0.014 (0.015)	-0.013 (0.016)
Spatial lag	14.358 (13.853)	15.744 (14.172)	14.530 (14.272)	15.795 (14.192)	11.275 (14.839)	15.267 (14.300)
Constant	-12.419*** (2.683)	-12.418*** (2.668)	-11.573*** (2.607)	-12.417*** (2.668)	-9.453*** (2.100)	-9.988*** (2.530)
Observations	689	689	689	689	689	689
R-squared	0.232	0.228	0.226	0.228	0.218	0.246
AIC	69.291	69.296	69.203	69.295	69.292	69.107
BIC	137.320	137.325	137.232	137.324	137.321	137.136

Robust standard errors in parentheses, clustered at administrative block level (subdistrict or level 4).

All regressions also include administrative block fixed effects. All distances in kilometers

* p<0.1, ** p<0.05, *** p<0.01.

Table A-5: Regression Estimates of Rebel Recruitment: Sample Restricted to North Lushai Hills

	Recruits per unit population				
	(1)	(2)	(3)	(4)	(5)
Proportion YMA members	1.354** (0.542)				
YMA branch (dummy)		0.423*** (0.152)			
Church & YMA branch (dummy)			0.428*** (0.152)		
Distance to the nearest revival village				-0.057*** (0.017)	
Structural connectivity index					0.420*** (0.138)
Proportion bamboo area	-0.001 (0.476)	0.124 (0.425)	0.129 (0.426)	-0.173 (0.469)	-0.101 (0.500)
Proportion WW II recruits	0.795 (2.961)	0.377 (2.903)	0.360 (2.889)	1.430 (3.256)	-0.399 (2.951)
Village prosperity index	0.276 (0.465)	0.121 (0.473)	0.120 (0.472)	0.327 (0.388)	0.208 (0.446)
Proportion in manufacturing & services	0.851 (1.244)	0.758 (1.259)	0.750 (1.256)	0.170 (1.237)	1.249 (1.389)
Area under paddy fields	-0.010 (0.015)	-0.007 (0.015)	-0.006 (0.015)	-0.003 (0.014)	-0.007 (0.014)
Proportion literate (PL)	1.281 (0.800)	1.361* (0.759)	1.364* (0.759)	1.460* (0.806)	1.233 (0.830)
Forest resources	0.300 (1.290)	0.100 (1.163)	0.110 (1.159)	0.781 (1.470)	0.666 (1.317)
Mean Elevation (log)	1.032*** (0.257)	1.046*** (0.256)	1.042*** (0.257)	0.739*** (0.202)	0.908*** (0.248)
Distance to road	-0.014 (0.013)	-0.013 (0.013)	-0.013 (0.013)	-0.006 (0.010)	-0.010 (0.011)
Distance to the nearest village	0.082** (0.032)	0.071** (0.032)	0.071** (0.032)	0.109*** (0.036)	0.086*** (0.031)
Distance to border	0.020 (0.015)	0.019 (0.014)	0.019 (0.014)	0.013 (0.013)	0.016 (0.016)
Distance to security post	0.002 (0.011)	-0.000 (0.010)	-0.000 (0.010)	-0.005 (0.010)	-0.002 (0.010)
Distance to post office	-0.004 (0.010)	-0.001 (0.010)	-0.001 (0.010)	-0.004 (0.010)	-0.002 (0.010)
Spatial Lag	17.348 (10.855)	19.652* (11.615)	19.858* (11.649)	10.274 (12.632)	17.162* (10.376)
Constant	-12.948*** (2.019)	-12.997*** (1.912)	-12.980*** (1.914)	-10.221*** (1.768)	-12.334*** (2.028)
Observations	377	377	377	377	377
R-squared	0.267	0.266	0.267	0.252	0.295
AIC	58.119	58.109	58.107	58.093	58.014
BIC	121.034	121.025	121.023	121.009	120.930

Robust standard errors in parentheses, clustered at administrative subdistrict level (level 4).

All estimates include administrative block (level 4) fixed effects. All distances in kilometers.

* p<0.10, ** p<0.05, *** p<0.01

Table A-6: Regression Estimates of Rebel Recruitment: Generalized Linear Model v. Ordinary Least Square

	Recruits per unit population									
	(GLM: Models 1-5)					(OLS: Models 6-10)				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Proportion YMA members	1.307** (0.531)					0.010** (0.004)				
YMA branch (dummy)		0.366** (0.151)					0.003** (0.001)			
Church & YMA branch (dummy)			0.368** (0.151)					0.003** (0.001)		
Distance to the nearest revival village				-0.036** (0.018)					-0.0001 (0.0001)	
Structural connectivity index					0.436*** (0.120)					0.002** (0.001)
Proportion bamboo area	-0.863 (0.585)	-0.774 (0.569)	-0.772 (0.570)	-0.851 (0.523)	-0.891 (0.573)	-0.005* (0.003)	-0.004* (0.002)	-0.004 (0.002)	-0.005* (0.002)	-0.005* (0.003)
Proportion WW II recruits	1.516 (3.229)	1.305 (3.204)	1.295 (3.199)	2.572 (3.329)	0.686 (3.314)	0.018 (0.021)	0.014 (0.021)	0.014 (0.021)	0.025 (0.023)	0.016 (0.020)
Village prosperity index	0.039 (0.388)	-0.028 (0.376)	-0.029 (0.376)	0.065 (0.348)	0.010 (0.358)	0.000 (0.003)	-0.000 (0.003)	-0.000 (0.003)	0.000 (0.003)	-0.000 (0.003)
Proportion in manufacturing & services	-0.123 (0.885)	-0.184 (0.895)	-0.185 (0.895)	-0.571 (0.806)	-0.113 (0.908)	-0.001 (0.005)	-0.001 (0.005)	-0.001 (0.005)	-0.002 (0.004)	-0.000 (0.005)
Area under paddy fields	-0.037* (0.019)	-0.036* (0.020)	-0.036* (0.020)	-0.032 (0.020)	-0.033* (0.019)	-0.000*** (0.000)	-0.000** (0.000)	-0.000** (0.000)	-0.000** (0.000)	-0.000** (0.000)
Proportion literate (PL)	1.300* (0.735)	1.341* (0.723)	1.342* (0.722)	1.263* (0.766)	1.028 (0.752)	0.007 (0.004)	0.007* (0.004)	0.007* (0.004)	0.007* (0.004)	0.005 (0.004)
Forest resources	1.430 (1.041)	1.421 (1.022)	1.427 (1.022)	1.122 (1.078)	1.378 (0.977)	0.004 (0.007)	0.005 (0.007)	0.005 (0.007)	0.003 (0.008)	0.003 (0.007)
Mean Elevation (log)	0.573 (0.388)	0.578 (0.390)	0.577 (0.390)	0.395 (0.320)	0.393 (0.376)	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)	0.001 (0.001)	0.001 (0.001)
Distance to road	-0.009 (0.011)	-0.009 (0.011)	-0.009 (0.011)	-0.003 (0.009)	-0.003 (0.009)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)
Distance to the nearest village	0.094** (0.038)	0.087** (0.039)	0.088** (0.039)	0.109*** (0.037)	0.094** (0.038)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.001** (0.000)	0.000 (0.000)
Distance to border	0.023* (0.012)	0.022* (0.012)	0.022* (0.012)	0.018* (0.011)	0.017 (0.012)	0.000* (0.000)	0.000* (0.000)	0.000* (0.000)	0.000 (0.000)	0.000 (0.000)
Distance to security post	-0.002 (0.009)	-0.003 (0.009)	-0.003 (0.009)	-0.003 (0.009)	-0.004 (0.009)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Distance to post office	-0.015 (0.015)	-0.013 (0.015)	-0.013 (0.015)	-0.014 (0.015)	-0.013 (0.016)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Spatial Lag	14.358 (13.853)	15.744 (14.172)	15.795 (14.192)	11.275 (14.839)	15.267 (14.300)	0.140 (0.147)	0.149 (0.150)	0.150 (0.150)	0.122 (0.153)	0.138 (0.150)
Constant	-12.419*** (2.683)	-12.418*** (2.668)	-12.417*** (2.668)	-9.453*** (2.100)	-9.988*** (2.530)	-0.013 (0.010)	-0.013 (0.010)	-0.013 (0.010)	-0.006 (0.008)	-0.005 (0.009)
Observations	689	689	689	689	689	689	689	689	689	689
AIC	69.291	69.296	69.295	69.292	69.107	-4534.086	-4533.226	-4533.246	-4528.449	-4539.304
BIC	137.320	137.325	137.324	137.321	137.136	-4466.058	-4465.197	-4465.217	-4460.420	-4471.275

Robust standard errors in parentheses, clustered at administrative block level (level 4).
 All estimates include administrative block (level 4) fixed effects. All distances in kilometers.
 * p<0.10, ** p<0.05, *** p<0.01

Table A-7: Regression Estimates of Rebel Recruitment: Varying Radii for Spatial Lag

	Recruits per unit population				
	Spatial lag=6km (1)	Spatial lag=10km (2)	Spatial lag=15km (3)	Spatial lag=20km (4)	Spatial lag=25km (5)
Proportion YMA members	1.307** (0.531)	1.309** (0.541)	1.398** (0.586)	1.368** (0.535)	1.288** (0.524)
Proportion bamboo area	-0.863 (0.585)	-0.660 (0.489)	-0.991 (0.583)	-1.036 (0.639)	-1.018 (0.652)
Proportion WW II recruits	1.516 (3.229)	1.838 (2.609)	1.606 (2.705)	2.059 (2.979)	1.631 (3.039)
Village prosperity index	0.039 (0.388)	0.052 (0.454)	0.049 (0.384)	0.045 (0.386)	0.028 (0.387)
Proportion in manufacturing & services	-0.123 (0.885)	0.432 (0.819)	0.309 (0.831)	0.122 (0.917)	0.039 (0.891)
Area under paddy fields	-0.037 (0.019)	-0.031 (0.017)	-0.033 (0.018)	-0.036 (0.019)	-0.037 (0.020)
Proportion literate (PL)	1.300 (0.735)	1.103 (0.671)	1.087 (0.709)	1.113 (0.705)	1.118 (0.735)
Forest resources	1.430 (1.041)	0.782 (1.178)	0.951 (1.214)	0.651 (1.144)	0.700 (1.180)
Mean Elevation (log)	0.573 (0.388)	0.104 (0.349)	0.149 (0.328)	0.266 (0.341)	0.350 (0.363)
Distance to road	-0.009 (0.011)	-0.007 (0.011)	-0.006 (0.010)	-0.005 (0.010)	-0.005 (0.010)
Distance to the nearest village	0.094** (0.038)	0.078** (0.037)	0.091** (0.040)	0.085** (0.039)	0.086** (0.039)
Distance to border	0.023 (0.012)	0.009 (0.012)	0.012 (0.010)	0.018 (0.010)	0.020** (0.010)
Distance to security post	-0.002 (0.009)	-0.001 (0.008)	-0.005 (0.009)	-0.006 (0.009)	-0.007 (0.009)
Distance to post office	-0.015 (0.015)	-0.022** (0.011)	-0.021 (0.012)	-0.018 (0.013)	-0.018 (0.015)
Spatial Lag	14.358 (13.853)	110.273*** (19.403)	126.555*** (21.758)	124.245*** (31.375)	122.303** (51.080)
Constant	-12.419*** (2.683)	-8.827*** (2.566)	-9.221*** (2.447)	-9.885*** (2.498)	-10.545*** (2.654)
Observations	689	689	689	689	689
AIC	69.291	68.765	68.965	69.146	69.229
BIC	137.320	136.794	136.993	137.175	137.258

Robust standard errors in parentheses, clustered at administrative block level (level4).

All estimates include administrative block (level 4) fixed effects. All distances in kilometers.

* p<0.10, ** p<0.05, *** p<0.01

Table A-8: Regression Estimates of Rebel Recruitment: Recruits with Missing Location Assigned to Villages With High Deviance Residuals

	Recruits per unit population							
	(Original DV)				(Imputed DV†)			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Proportion YMA members	1.307** (0.531)				1.190** (0.600)			
Church & YMA branch (dummy)		0.368** (0.151)				0.271* (0.160)		
Distance to the nearest revival village			-0.036** (0.018)				-0.033** (0.014)	
Structural connectivity index				0.436*** (0.120)				0.459*** (0.125)
Proportion bamboo area	-0.863 (0.585)	-0.772 (0.570)	-0.851 (0.523)	-0.891 (0.573)	-1.798 (1.012)	-1.725 (1.003)	-1.778 (0.994)	-1.840 (1.033)
Proportion WW II recruits	1.516 (3.229)	1.295 (3.199)	2.572 (3.329)	0.686 (3.314)	-0.809 (5.431)	-0.686 (5.474)	0.278 (5.636)	-1.818 (5.544)
Village prosperity index	0.039 (0.388)	-0.029 (0.376)	0.065 (0.348)	0.010 (0.358)	-0.202 (0.488)	-0.237 (0.476)	-0.166 (0.455)	-0.241 (0.462)
Proportion in manufacturing & services	-0.123 (0.885)	-0.185 (0.895)	-0.571 (0.806)	-0.113 (0.908)	0.231 (0.882)	0.177 (0.895)	-0.128 (0.854)	0.177 (0.880)
Area under paddy fields	-0.037 (0.019)	-0.036 (0.020)	-0.032 (0.020)	-0.033 (0.019)	-0.046 (0.027)	-0.045 (0.028)	-0.042 (0.027)	-0.041 (0.025)
Proportion literate (PL)	1.300 (0.735)	1.342 (0.722)	1.263 (0.766)	1.028 (0.752)	1.283 (1.079)	1.311 (1.081)	1.205 (1.130)	0.939 (1.036)
Forest resources	1.430 (1.041)	1.427 (1.022)	1.122 (1.078)	1.378 (0.977)	1.800** (0.885)	1.794** (0.881)	1.524 (0.875)	1.678** (0.840)
Mean Elevation (log)	0.573 (0.388)	0.577 (0.390)	0.395 (0.320)	0.393 (0.376)	0.349 (0.490)	0.353 (0.490)	0.162 (0.420)	0.129 (0.468)
Distance to road	-0.009 (0.011)	-0.009 (0.011)	-0.003 (0.009)	-0.003 (0.009)	-0.010 (0.019)	-0.010 (0.019)	-0.003 (0.018)	-0.003 (0.018)
Distance to the nearest village	0.094** (0.038)	0.088** (0.039)	0.109*** (0.037)	0.094** (0.038)	0.115** (0.054)	0.111** (0.056)	0.125** (0.053)	0.110 (0.056)
Distance to border	0.023 (0.012)	0.022 (0.012)	0.018 (0.011)	0.017 (0.012)	0.037 (0.022)	0.036 (0.022)	0.030 (0.020)	0.029 (0.020)
Distance to security post	-0.002 (0.009)	-0.003 (0.009)	-0.003 (0.009)	-0.004 (0.009)	-0.003 (0.009)	-0.004 (0.008)	-0.004 (0.009)	-0.005 (0.009)
Distance to post office	-0.015 (0.015)	-0.013 (0.015)	-0.014 (0.015)	-0.013 (0.016)	-0.015 (0.015)	-0.014 (0.015)	-0.016 (0.015)	-0.013 (0.016)
Spatial Lag	14.358 (13.853)	15.795 (14.192)	11.275 (14.839)	15.267 (14.300)	8.758 (18.844)	9.626 (19.106)	5.320 (19.612)	8.805 (19.589)
Constant	-12.419*** (2.683)	-12.417*** (2.668)	-9.453*** (2.100)	-9.988*** (2.530)	-9.524*** (3.402)	-9.529*** (3.385)	-6.596** (2.740)	-6.681** (3.154)
Observations	689	689	689	689	689	689	689	689
AIC	69.291	69.295	69.292	69.107	77.865	77.891	77.844	77.565
BIC	137.320	137.324	137.321	137.136	145.894	145.920	145.872	145.594

Robust standard errors in parentheses, clustered at administrative block level (level4).

All estimates include administrative block (level 4) fixed effects. All distances in kilometers.

* p<0.10, ** p<0.05, *** p<0.01

†The recruits with missing location were randomly assigned with replacement to the villages that constitute the bottom 5 percent in terms of the square of their deviance residuals based on Model 6 in Table 2.

Table A-9: Regression Estimates of Rebel Recruitment: Measures of Geographical Proximity as Control Variables

	Recruits per unit population		
	Number of neighbors [§] (1)	Village density [†] (2)	Distance to the nearest village (3)
Proportion YMA members	1.294** (0.516)	1.326*** (0.499)	1.307** (0.531)
Proportion bamboo area	-0.930 (0.621)	-0.802 (0.590)	-0.863 (0.585)
Proportion WW II recruits	1.057 (2.969)	1.058 (2.904)	1.516 (3.229)
Village prosperity index	0.083 (0.426)	-0.135 (0.409)	0.039 (0.388)
Proportion in manufacturing & services	-0.069 (0.918)	-0.352 (0.983)	-0.123 (0.885)
Area under paddy fields	-0.041** (0.019)	-0.045** (0.018)	-0.037 (0.019)
Proportion literate (PL)	1.363 (0.735)	1.299 (0.769)	1.300 (0.735)
Forest resources	1.559 (1.076)	1.561 (1.124)	1.430 (1.041)
Mean Elevation (log)	0.541 (0.391)	0.608 (0.409)	0.573 (0.388)
Distance to road	-0.012 (0.011)	-0.008 (0.011)	-0.009 (0.011)
Distance to border	0.020 (0.011)	0.025** (0.012)	0.023 (0.012)
Distance to security post	-0.004 (0.009)	-0.001 (0.009)	-0.002 (0.009)
Distance to post office	-0.009 (0.015)	-0.010 (0.014)	-0.015 (0.015)
Number of neighbors	-0.098*** (0.030)		
Village density (log)		-0.184 (0.467)	
Distance to the nearest village			0.094** (0.038)
Spatial Lag	14.898 (13.273)	9.201 (14.499)	14.358 (13.853)
Constant	-11.687*** (2.687)	-11.392*** (2.262)	-12.419*** (2.683)
Observations	689	689	689
AIC	69.294	69.361	69.291
BIC	137.322	137.390	137.320

Robust standard errors in parentheses, clustered at administrative block level (level4).

All estimates include administrative block (level 4) fixed effects. All distances in kilometers.

* p<0.10, ** p<0.05, *** p<0.01

[§] Calculated as the number of villages within a radius of 5 kilometers of a village.

[†] Calculated as the number of villages within a neighborhood cell of approximately 4 kilometers around a village divided by the area of the cell.

Table A-10: Regression Estimates of Rebel Recruitment: Subsets of Recruits as Dependent Variable

	Rebels per unit population				
	(1) All Recruits	(2) Surrendered (S)	(3) Arrested (A)	(4) Demobilized (D)	(5) S+A+D
Proportion YMA members	1.307** (0.531)	0.752 (0.956)	1.286 (0.678)	2.172 (1.528)	1.227 (0.873)
Proportion bamboo area	-0.863 (0.585)	0.254 (1.017)	-0.688 (1.350)	-2.077 (1.568)	-0.676 (1.010)
Proportion WW II recruits	1.516 (3.229)	0.673 (5.329)	3.564 (6.762)	9.610 (5.029)	6.261 (4.115)
Village prosperity index	0.039 (0.388)	0.106 (0.534)	0.023 (1.225)	0.423 (0.629)	0.328 (0.337)
Proportion in manufacturing & services	-0.123 (0.885)	-0.466 (1.803)	-0.772 (2.793)	3.925** (1.642)	2.470 (1.296)
Area under paddy fields	-0.037 (0.019)	-0.053** (0.027)	-0.045 (0.034)	-0.092 (0.049)	-0.060*** (0.017)
Proportion literate (PL)	1.300 (0.735)	0.955 (1.043)	4.036** (1.571)	1.566 (0.992)	1.449 (0.962)
Forest resources	1.430 (1.041)	4.702 (3.202)	-9.462** (4.529)	7.238*** (2.341)	4.242 (3.236)
Mean Elevation (log)	0.573 (0.388)	0.122 (0.330)	0.443 (0.553)	-0.646 (0.473)	-0.066 (0.304)
Distance to road	-0.009 (0.011)	-0.012 (0.016)	-0.009 (0.026)	-0.005 (0.028)	-0.006 (0.016)
Distance to the nearest village	0.094** (0.038)	0.058 (0.064)	0.218*** (0.066)	0.009 (0.131)	0.072 (0.069)
Distance to border	0.023 (0.012)	0.016 (0.011)	0.000 (0.030)	-0.004 (0.019)	0.009 (0.010)
Distance to security post	-0.002 (0.009)	-0.005 (0.014)	0.005 (0.018)	-0.009 (0.032)	-0.007 (0.014)
Distance to post office	-0.015 (0.015)	0.016 (0.022)	-0.021 (0.025)	-0.018 (0.045)	-0.002 (0.023)
Spatial Lag	14.358 (13.853)	28.504 (16.367)	-13.246 (24.552)	12.186 (20.202)	19.432 (15.053)
Constant	-12.419*** (2.683)	-12.603*** (1.805)	-19.030*** (3.492)	-7.093 (3.637)	-9.718*** (2.514)
Observations	689	689	689	689	689
AIC	69.291	48.987	42.046	45.424	55.263
BIC	137.320	130.621	128.216	127.058	127.827

Robust standard errors in parentheses, clustered at administrative block level (level4).

All estimates include administrative block (level 4) fixed effects. All distances in kilometers.

* p<0.10, ** p<0.05, *** p<0.01

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