

APPENDIX TABLE 1: DISTRICTS OF BRITISH INDIA, WITH DATES AND MODE OF ACQUISITION BY THE BRITISH

Province	Region	Date and mode of acquisition	Districts included
Bengal Presidency	Calcutta	Set up by British in 1690 on land obtained from Mughal emperor	Calcutta
	First conquests	Came under British political control from 1757 to 1761	24-Parganas (parts), Burdwan, Midnapore (parts), Chittagong
	Bengal and Behar	Revenue collection rights granted by Mughal emperor in 1765	Bankura, Birbhum, Hooghly, Howrah, Malda, Murshidabad, Nadiya(modern West Bengal); Bhagalpur, Champaran, Darbhanga,Gaya, Hazaribagh, Lohardagga, Munger, Patna, Purnea, Santal Parganas, Saran, Shahabad, Singhbhum (modern Bihar); Bakirganj, Bogra, Dacca, Faridpur, Dinajpur, Jessore, Khulna, Maimansingh, Noakhalli, Pabna, Rajshahi, Rangpur, Tipra (modern Bangladesh)
	Jalpaiguri and Darjeeling Orissa	Came under control in 1826 and 1838 respectively. Conquered in 1803	Jalpaiguri, Darjeeling. Balasore, Cuttack, Puri (rest of Orissa under tributary chiefs)
Madras Presidency	Jagir	Granted by Nawab of the Carnatic in 1750-63	Chingleput, Madras
	Northern Circars	Granted by Mughal emperor in 1765, grant confirmed by Nizam of Deccan in 1768.	Vizagapatam, Ganjam, Kistna, Godavari
	Territories obtained from Mysore	Obtained from Mysore after the Second Mysore War 1792	Salem, Coimbatore, Malabar, Kanara, some areas of Madura
	Ceded Districts	Obtained by Nizam of Deccan after Mysore War and then ceded to British in 1800	Anantapur, Bellary, Cuddapah, Karnul
	Carnatic Districts Tanjore	Ceded to British by Nawab of Carnatic in 1801 Taken over by British due to incapacity of Hindu ruler in 1799	Nellore, North Arcot, South Arcot, Madura, Trichinopoly, Tinnevelly Tanjore
Princely states	Mysore	Taken over by British in 1831 due to mismanagement of ruler, given back to Wodeyars in 1881	Mysore

Province	Region	Date and mode of acquisition	Districts included
United Provinces	Benares Ceded Districts Conquered Districts Bundelkhand Taken over Dehradun Oudh	Ceded by the Nawab of Oudh in 1775 Ceded by the Nawab of Oudh in 1801 Conquered by Lord Lake from Scindia and others in 1803 Conquered in parts from 1803-17. Taken over due to lapse, forfeiture etc. in years after 1840. Ceded after the Nepal war in 1815 Annexed from Nawab of Oudh in 1856.	Benares, Mirzapur, Jaunpur, Ghazipur, Ballia, Azamgarh, Gorakhpur, Basti, Allahabad, Fatehpur, Kanpur, Farukhabad, Etawa, Mainpuri, Etah, Shahjahanpur, Badayun, Bareilly, Pilibhit, Moradabad, Bijnaur, Tarai Parganas Agra, Mathura, Aligarh, Bulandshahr, Meerut, Muzaffarnagar, Saharanpur Banda, Hamirpur Jalaun, Jhansi, Lalitpur Dehradun. Kheri, Sitapur, Hardoi, Lucknow, Unao, Barabanki, Rai-Bareilly, Partabgarh, Sultanpur, Faizabad, Gonda, Bahraich
Bombay Presidency	Surat Gujarat Maratha territory Satara Kanara Sindh Panch Mahals	Obtained from Nawab of Surat in 1800 Conquered from Baroda in 1803 and Marathas in 1818. Conquered from Peshwa in 1818 Taken over by lapse in 1848 Transferred from Madras in 1862 Conquered in 1843 Obtained in 1861	Surat Ahmedabad, Kaira, Broach Thana, Khandesh, Nasik, Ahmednagar, Poona, Sholapur, Kolaba, Ratnagiri, Belgaum (some parts obtained in 1827), Bijapur, Dharwar Satara Kanara Karachi, Haidarabad, Shikarpur, Upper Sindh Frontier, Thar & Parkar (modern Pakistan) Panch Mahals
Assam	From Bengal Assam Hill districts	Obtained as part of diwani in 1765, later transferred to Assam Conquered in 1824 Brought under control in 1830-35	Goalpara (modern Assam), Sylhet (modern Bangladesh) Darrang, Kamrup, Lakhimpur, Naugong, Sibsagar Cachar, Cachar Hills, Eastern Dwards (1866), Jaintya Parganas, Khasi and Jaintyas, Naga Hills.
Central Provinces	Maratha territory Sambalpur	Conquered from Bhonsle in 1818; some areas left under Bhonsle till 1854 Conquered in 1818, under local chief till 1849	Balaghat, Betul, Bhandara, Bilaspur, Chanda, Chhindwara, Damoh, Hoshangabad, Jabalpur, Mandla, Nagpur, Narsinghpur, Nimar (1820), Raipur, Sagar, Seoni, Wardah Sambalpur

Province	Region	Date and mode of acquisition	Districts included
Panjab	Delhi	Conquered in 1803	Delhi, Gurgaon, Hisar, Karnal
	Sikh territory	Obtained after Sikh War in 1845-46	Ambala, Ferozpur, Hoshiyarpur, Jalandhar, Kangra, Ludhiana
	Sikh territory	Obtained after Sikh War in 1849	Amritsar, Gurdaspur, Rohtak (India); Bannu, Dera Ghazi Khan, Dera Ismail Khan, Gujranwala, Gujrat, Hazara, Jhang, Jhelum, Kohat, Lahore, Montgomery, Multan, Muzaffargarh, Peshawar, Rawalpindi, Shahpur, Sialkot (Pakistan)
	Shimla	Obtained in 1815	Shimla

Source: Baden-Powell (1892,1894), Kumar (1982)

APPENDIX TABLE 2: ESTABLISHMENT OF LAND REVENUE SYSTEMS IN BRITISH INDIA

Province	Dates of British land revenue control	Formation of land tenure system
Bengal Presidency	1757, 1765	Revenue auctions in early 1770s; old landlords dispossessed, several defaults and famine; old landlords reinstated in 1784; Lord Cornwallis announces Permanent Settlement in 1793: landlords' rents fixed in perpetuity with stiff penalties for default.
Madras Presidency	1765, 1790-1801	1765 territories came under Permanent Settlement. Munro and Read tried individual system in some districts from 1796-1805; in 1807 all districts put under landlords for 3 years, leases renewed for 10 years in 1810-11; Munro went to England and convinced the Directors of the East India Company to order an individual settlement in the whole of Madras; order implemented after 1820 when leases expired; all future defaulting landlord estates also converted to individual system.
Bombay Presidency	1803, 1817-18	Individual system tried in Poona in 1820's, but failed; Wingate and Goldsmid start Bombay Survey System in 1835 for individual settlement system; a few long-standing landlords left in place in certain areas.
North-West Provinces	1775, 1801-03	Permanent Settlement in 1775 areas. 3 and 4-year landlord leases in 1802-1819. Question of Permanent Settlement widely debated; revenue secretary Holt Mackenzie's 1819 Minute recognized the existence of village bodies and asked for their rights to be protected in any settlement; regulation passed in 1822.
Oudh	1856	Lord Dalhousie announced settlement with village bodies wherever possible; Mutiny in 1857 before this could be done; Lord Canning reversed policy in 1858 and brought back landlords (<i>talukdars</i>) with full proprietary rights.
Central Provinces	1818, 1849	No fixed policy until landlord settlement (<i>malguzari</i>) announced in 1853, implemented in 1850s. Sambhalpur district however put under individual cultivator system.
Berar	1856	Was under Nizam till 1856; landlord system tried found unsuccessful; Bombay Survey System (individual cultivator based) implemented.
Assam	1765, 1824-26	Some areas transferred from Bengal had Permanent Settlement; others got individual-cultivator systems.
Panjab	1846, 1849	Village-based system put into place everywhere; practically no big landlords.

APPENDIX TABLE 3: DATA SOURCES AND CONSTRUCTION OF VARIABLES

Post-Independence data

Data on district geography, crop areas, yields, irrigation, fertilizer use, adoption of high-yielding varieties: India Agriculture and Climate Data Set (World Bank)
<http://www-esd.worldbank.org/indian/home.cfm>

District level data on literacy, occupation classes, proportion of scheduled castes etc:
Indian Database Project Vanneman, Reeve and Douglas Barnes (2000)
Indian District Data, 1961-1991: Machine-readable data file and codebook, Center on Population, Gender, and Social Inequality, College Park, Maryland.
URL: <http://www.bsos.umd.edu/socy/vanneman/districts/index.html>

Districts and maps of modern India: <http://www.mapsofindia.com>

Village infrastructure variables: State statistical abstracts of 1981

Land-holdings by size category: Agricultural census of 1990-91.

Data on poverty and inequality (1972, 1987): based on National Sample Surveys.

Data on state development expenditure: Database on Poverty and Growth in India compiled by Berk Ozler, Gaurav Datt and Martin Ravallion (World Bank)

Data on state land reforms: Besley and Burgess (2000)

Historical data

Districts and maps of British India: Baden-Powell (1892)

Non-landlord proportion:

For Uttar Pradesh, Madhya Pradesh and Panjab: computed from district-level Land Settlement Reports as the proportion of villages, estates or land area not under the revenue liability of landlords. The Settlement Reports were compiled by British administrators in the 1870's and 1880's.

For Madras Presidency: non-landlord proportion obtained from Baden-Powell (1892).

For Bombay Presidency, Bengal Presidency, Orissa, Berar and districts for which we do not have district-level settlement reports: Non-landlord measure is assigned as zero or one based on historical accounts of the dominant land tenure system in the district. Sources of information include Baden-Powell (1892), Gupta (1940), Kumar (1982), Misra (1942), Mukherjee (1962) and Patel (1957).

Land revenue inequality 1885: Digital South Asia Library (<http://dsal.uchicago.edu>)

Land revenue inequality 1948 for districts of Uttar Pradesh:
Report of the United Provinces Zamindari Abolition Committee, 11 (Allahabad, 1948) pp. 12-17.
Reproduced in Stokes (1978b).

APPENDIX TABLE 4: DETAILED REGRESSION SPECIFICATION

Dependent variable: Log agricultural yield (based on 15 major crops)

	No controls	Altitude, latitude	Mean annual rainfall, coastal dummy	Soil dummies	Date of British land revenue control
	(1)	(2)	(3)	(4)	(5)
Proportion non-landlord	0.101 (0.076)	0.091 (0.088)	0.123 (0.086)	0.117* (0.069)	0.157** (0.071)
Altitude (x 10 ⁻³)		0.296 (0.243)	0.425* (0.245)	0.644*** (0.194)	0.722*** (0.189)
Latitude		0.004 (0.006)	0.003 (0.007)	-0.007 (0.007)	-0.006 (0.007)
Mean annual rainfall (x 10 ⁻³)			0.161** (0.067)	0.029 (0.060)	0.006 (0.062)
Coastal dummy			0.171* (0.096)	0.072 (0.094)	0.032 (0.093)
Black soil dummy				-0.409*** (0.085)	-0.396*** (0.085)
Red soil dummy				0.137* (0.071)	0.104 (0.069)
Alluvial soil dummy				0.196*** (0.053)	0.190*** (0.052)
Date of British land revenue control					-0.002*** (0.001)
Constant	-0.314*** (0.038)	-0.503*** (0.145)	-0.782*** (0.181)	-0.494*** (0.186)	3.586** (1.502)
Year fixed effects	yes	yes	yes	yes	yes
No. of districts	166	166	166	166	166
R-squared	0.17	0.19	0.23	0.42	0.43

* significant at 10%; ** significant at 5%; *** significant at 1%
Standard errors in parantheses, adjusted for district-level clustering.
Data for from 1956-87.

APPENDIX TABLE 5 : LIST OF NEIGHBORING DISTRICTS

Group	States	Landlord districts	Non-landlord districts	Reason for difference in tenure
1	Andhra Pradesh	Srikakulam Vishakhapatnam	East Godavari	Areas put under landlords and Permanent Settlement before the rest of Madras Presidency was converted to individual system.
2	Tamil Nadu	Madurai Ramanathapuram	Coimbatore Thanjavur Tiruchirapalli Tirunelveli	Areas put under landlords and Permanent Settlement before the rest of Madras Presidency was converted to individual system.
3	Madhya Pradesh, Orissa	Bilaspur Raipur	Raigarh Sambalpur	Sambalpur district was put under individual cultivator system, unlike the rest of the Central Provinces.
4	Maharashtra, Madhya Pradesh	Chandrapur Wardha Betul	Amravati Yavatmal	Berar province was individual-based while Central Provinces was landlord-based.
5	Uttar Pradesh (East)	Faizabad Gonda Pratapgarh Sultanpur	Allahabad Azamgarh Basti Gorakhpur Jaunpur	Oudh districts have greater % of landlords because of change of policy after 1857 Mutiny.
6	Uttar Pradesh (West)	Hardoi Kheri Rae Bareli Unnao	Farrukhabad Fatehpur Kanpur Nagar Pilibhit Shahjahanpur	Oudh districts have greater % of landlords because of change of policy after 1857 Mutiny.

APPENDIX TABLE 6
CHANGES IN POVERTY AND INEQUALITY

Dependent variable	Mean of dep.var	Coefficient on non-landlord proportion				
		OLS Full sample (1)	OLS Full sample (2)	OLS Neighbors only (3)	IV Full sample (4)	OLS State FE (5)
Change in rural income Gini coefficient from 1972-1987	-0.0018	0.033** (0.013)	0.019* (0.010)	0.011 (0.010)	-0.013 (0.026)	0.018** (0.007)
Change in rural Head Count Ratio from 1972 to 1987	-10.95	-3.491 (3.108)	-6.844*** (2.466)	-4.951 (2.965)	8.187 (13.235)	-5.701** (2.275)
No. of districts ^a		218	218	37	218	150
Year fixed effects		YES	YES	YES	YES	YES
Control for initial 1972 level		NO	YES	YES	YES	YES
Control for geography and date of British revenue control		YES	YES	YES	YES	YES
State fixed effects		NO	NO	NO	NO	YES

Standard errors in parentheses, corrected for NSS region level clustering.

* significant at 10%; ** significant at 5%; *** significant at 1%

Geographic controls are altitude, latitude, mean annual rainfall, and dummies for soil type and coastal regions.

States which have no within-state variation in the non-landlord proportion (West Bengal, Bihar, Gujarat and Karnataka) are effectively dropped from regressions involving state fixed effects, and the number of districts is for states which have within-state variation in the non-landlord proportion.

^aThis refers to 1991 districts. The number of districts is 184 for 1981 and 150 for 1971.

APPENDIX TABLE 7
DIFFERENCES IN STATE DEVELOPMENT EXPENDITURE

Variable	Mean		Difference
	Landlord states (1)	Non-landlord states (2)	
<u>Real development expenditure (1960 rupees per capita)</u>			
1960-1992	26.38	44.24	7.37 (2.45)
1960-1965	12.80	19.18	5.67 (1.83)
1966-1992	29.40	49.40	8.18 (2.54)
<u>Development expenditure/state domestic product</u>			
1960-1992	0.0869	0.1056	0.0218 (0.0071)
1960-1965	0.0497	0.0639	0.0195 (0.0071)
1966-1992	0.0952	0.1135	0.0227 (0.0074)

Robust standard errors in parantheses.

Differences between landlord and non-landlord states is computed by regressing on state-level average non-landlord proportion, after controlling for state domestic product (SDP) per capita and year fixed effects.

Landlord states are Bihar, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal.

Non-landlord states are Andhra Pradesh, Assam, Gujarat, Karnataka, Kerala, Maharashtra, Punjab and Tamil Nadu.

Data is for 14 major states.

APPENDIX TABLE 8
DIFFERENCES IN CRIME RATES

Dependent variable	Mean of dep.var	Coefficient on non-landlord proportion			
		OLS	OLS	IV	OLS
		Full sample (1)	Neighbors only (2)	Full sample (3)	State FE (4)
CRIME RATES: 1971, 1981, 1991					
Total crime/'000 population	2.024	-0.733*** (0.239)	-0.178 (0.423)	-1.998** (0.888)	-0.461** (0.223)
Violent crime/'000 population	0.246	-0.070*** (0.023)	-0.045* (0.026)	-0.178** (0.083)	-0.021 (0.019)
Petty crimes/'000 population	0.055	-0.002 (0.009)	-0.007 (0.010)	-0.059 (0.039)	-0.007 (0.009)
No. of districts ^a		218	37	218	150
Year fixed effects		YES	YES	YES	YES
Control for geography and date of British revenue control		YES	YES	YES	YES
State fixed effects		NO	NO	NO	YES

Standard errors in parentheses, corrected for district-level clustering

* significant at 10%; ** significant at 5%; *** significant at 1%

Geographic controls are altitude, latitude, mean annual rainfall, and dummies for soil type and coastal regions.

Violent crime includes murder, homicide, rape, kidnap, dacoity and riots.

Petty crime includes cheating and counterfeiting.

States which have no within-state variation in the non-landlord proportion (West Bengal, Bihar, Gujarat and Karnataka) are effectively dropped from regressions involving state fixed effects, and the number of districts is for states which have within-state variation in the non-landlord proportion.

^aThis refers to 1991 districts. The number of districts is 184 for 1981 and 150 for 1971.