

Variable Name	Description
Outcome Variables	
rebellions_per_million	Captures the frequency of social unrest per population size to account for county size differences.
onset_all	Total number of events recorded.
ashonset_cntypop1600	Inverse hyperbolic sine (asinh) transformation of the ratio of events (onset_all) to the estimated country population in 1600. For SCM renamed to y
lamout	Shipping Volume (log million piculs).
Treatment Variables	
alongcanal	Binary variable: 1 if the county borders or contains part of the Grand Canal, 0 otherwise.
ashprerebels	Inverse hyperbolic sine (asinh) transformation of the number of rebels present before the 1826 reform.
town1820_r10canal	Percentage of towns within a county located within 10 kilometers of the canal.
connected	Used for robustness checks.
interaction1	Interaction term for counties along the canal (AlongCanal_c) and the post-reform period (Post_t).
interaction2	Interaction term for Canal_Length and time after abandonment .
canal_length	Length of the Grand Canal segment within each county, normalized by the county's land area.
distance_canal	Distance from the county administrative center to the nearest point of the Grand Canal.
Geographic and Environmental Controls	
lpopdencnty1600_after	Log of population density in the county interacted with Post_t
land_area	Total land area of each county; accounts for geographic scale differences.
ruggedness	Index measuring terrain ruggedness based on elevation differences.
popden1600	Population density estimated at the county level in the year 1600.
climate	Binary variable: 1 if extreme events (e.g., droughts, floods, temperature anomalies) occurred, 0 otherwise.

flooding	A binary variable equal to 1 if a drought event happend during the observation period, while 0 indicates that no drought event was recorded.
drought	A binary variable equal to 1 indicates that a flooding event occurred, while 0 indicates no flooding event during that time
disaster	A binary variable equal to 1 if a temparature anormality happend, 0 if no disaster was recorded.
rug_after	Interaction between ruggedness and Post_t .
land_area_after	Interaction between land_area and Post_t .
disaster_after	Interaction between disaster and Post_t .
flooding_after	Interaction between flooding and Post_t .
Y_COORD	Latitude
X_COORD	Longitude
drought_after	Interaction between drought and Post_t .

Agricultural Variables

si_rice	Suitability index (0 to 1) for wetland rice and wheat crops.
maize	Binary variable: 1 if maize cultivation was adopted, 0 otherwise.
sweetpotato	Binary variable: 1 if sweet potato cultivation was adopted, 0 otherwise.
si_wheat	Suitability index for wheat cultivation (irrigation and medium input).
maize_after	Interaction between maize and Post_t .
sweetpotato_after	Interaction between sweetpotato and Post_t .
rice_after	Interaction between si_rice and Post_t .
wheat_after	Interaction between si_wheat and Post_t .

Temporal Variables

year	Year of the observation.
Post_t	Post-reform period: 1 in or after 1826, 0 before 1826.

Other Controls

solider	Number of imperial soldiers recorded as stationed in each county.
green_senior	Count of senior members of the Green Gang, a social group formed partly due to canal abandonment.

Identifiers

OBJECTID	County ID
provid	Province ID.
prefid	Prefecture ID.
onset_all	Total number of events recorded.