

Supplementary Materials

Table S1 Summary statistics of the variables.

Variable	N	Mean	Min	Median	Max	S.D
<i>num_msw</i>	4003	1.721	0	1	43	2.283
<i>num_land</i>	4003	1.134	0	1	21	1.405
<i>num_inci</i>	4003	0.467	0	0	11	1.007
<i>capa_msw</i>	4003	1408	0	670	36600	2589
<i>capa_land</i>	4003	855.7	0	500	15350	1454
<i>capa_inci</i>	4003	502.3	0	0	19300	1329
<i>gdppc</i>	4000	43.70	3.614	35.20	211.3	29.52
<i>popden</i>	4003	0.463	0.00500	0.332	6.728	0.531
<i>serperc</i>	3997	39.43	8.575	38.25	88.30	10.01
<i>hprice</i>	3997	4.814	1.060	4.055	51.16	3.365
<i>soden</i>	3647	5.639	0.00100	2.895	67.96	7.544
<i>city_eip</i>	4004	0.0470	0	0	1	0.211
<i>cleancity</i>	4004	0.349	0	0	1	0.477

Table S2 Estimated IRRs of the Poisson regression model.

Variable	<i>num_msw</i>	<i>num_land</i>	<i>num_inci</i>	<i>num_other</i>
<i>gdppc</i>	1.010*** (0.00136)	1.005*** (0.00158)	1.016*** (0.00359)	1.0280*** (0.0087)
<i>popden</i>	0.797 (0.189)	1.373 (0.388)	0.369** (0.167)	1.2262 (1.4070)
<i>serperc</i>	1.018*** (0.00312)	1.006 (0.00368)	1.063 *** (0.00949)	1.0450*** (0.0174)
<i>hprice</i>	0.995 (0.00721)	0.981 (0.0131)	0.996 (0.0168)	0.9897 (0.0333)
<i>soden</i>	0.993 (0.00414)	0.995 (0.00421)	0.994 (0.00461)	1.0220 (0.0329)
<i>city_eip</i>	0.984 (0.0684)	0.949 (0.0812)	0.728** (0.113)	0.9337 (0.3575)
<i>cleancity</i>	1.073 (0.0527)	1.015 (0.0645)	1.400* (0.241)	1.7080 (0.7015)
<i>N</i>	3634	3507	2210	1346
<i>Wald chi2(7)</i>	342.44	25.12	246.94	90.32

Notes: Robust standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table S3 Estimated regression coefficients the Poisson regression model.

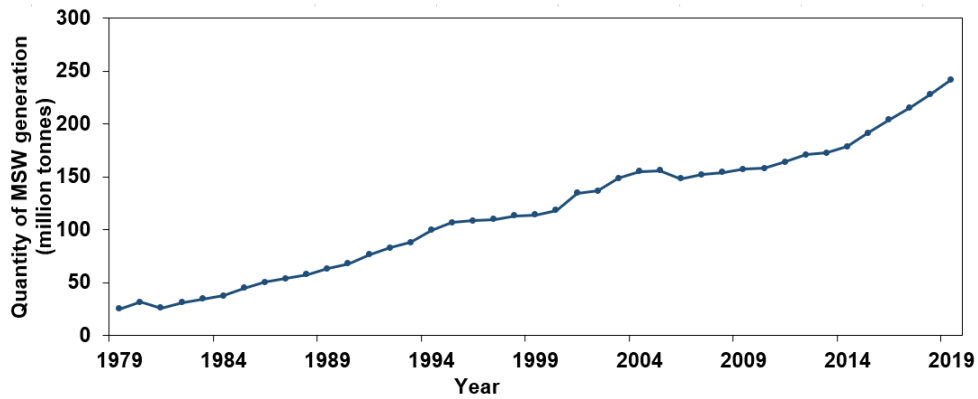
Variable	<i>num_msw</i>	<i>num_land</i>	<i>num_inci</i>	<i>num_other</i>
<i>gdppc</i>	0.00949*** (0.00135)	0.00485*** (0.00157)	0.0155*** (0.00353)	0.0276*** (0.0084)
<i>popden</i>	-0.227 (0.238)	0.317 (0.283)	-0.996** (0.453)	0.2039 (1.1475)
<i>serperc</i>	0.0175*** (0.00306)	0.00567 (0.00366)	0.0608*** (0.00893)	0.0440*** (0.0167)
<i>hprice</i>	-0.00503 (0.00724)	-0.0189 (0.0133)	-0.00410 (0.0169)	-0.0103 (0.0337)
<i>soden</i>	-0.00677 (0.00417)	-0.00501 (0.00423)	-0.00558 (0.00463)	0.0217 (0.0321)
<i>city_eip</i>	-0.0165 (0.0696)	-0.0519 (0.0855)	-0.318** (0.155)	-0.0687 (0.3829)
<i>cleancity</i>	0.0708 (0.0491)	0.0154 (0.0635)	0.336* (0.172)	0.5353 (0.4107)
<i>N</i>	3634	3507	2210	1346
<i>Wald chi2(7)</i>	342.44	25.12	246.94	90.32

Notes: Robust standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

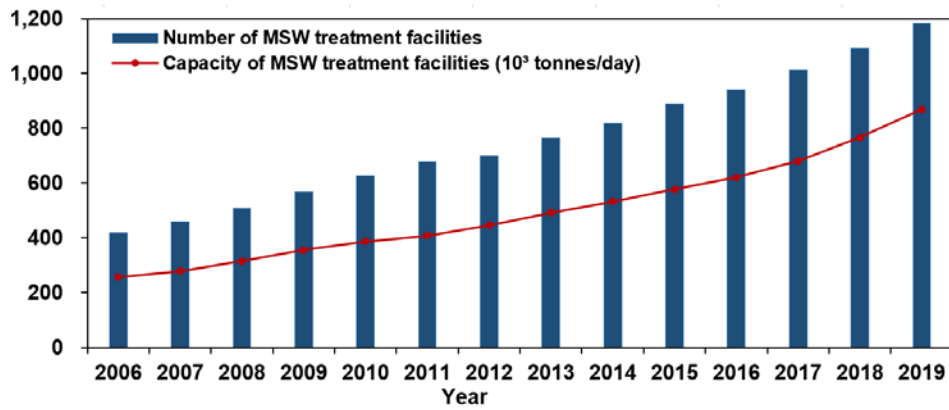
Table S4 Regression results with MSW disposal capacities of other treatment approaches as the dependent variable.

Variable	(1) <i>capa_other</i>	(2) <i>capa_other</i>	(3) <i>capa_other</i>	(4) <i>capa_other</i>
<i>gdppc</i>	-0.596 (1.087)	-1.434 (1.582)	0.479 (1.041)	0.707 (0.943)
<i>popden</i>	-30.25 (110.9)	28.06 (228.0)	-28.27 (262.8)	212.3* (106.5)
<i>serperc</i>	2.092 (1.366)	-2.260 (1.829)	-2.202 (1.533)	-0.0799 (1.169)
<i>hprice</i>	41.39 (34.48)	40.48 (34.25)	46.35 (38.05)	19.35** (8.451)
<i>soden</i>	2.737 (2.866)	1.210 (3.762)	1.822 (3.889)	-2.990 (2.174)
<i>city_eip</i>	221.7 (177.9)	200.8 (147.8)	179.9 (140.8)	67.04 (48.42)
<i>cleancity</i>	-103.0* (57.01)	-16.76 (27.29)	-6.224 (23.55)	8.947 (14.60)
<i>constant</i>	-176.9** (75.40)	2622.2*** (358.5)	2463.4*** (492.7)	7041.8*** (355.4)
City FE		Y	Y	Y
Year FE			Y	
Province*Year FE				Y
<i>N</i>	3634	3634	3634	3634
<i>R</i> ²	0.213	0.625	0.634	0.824

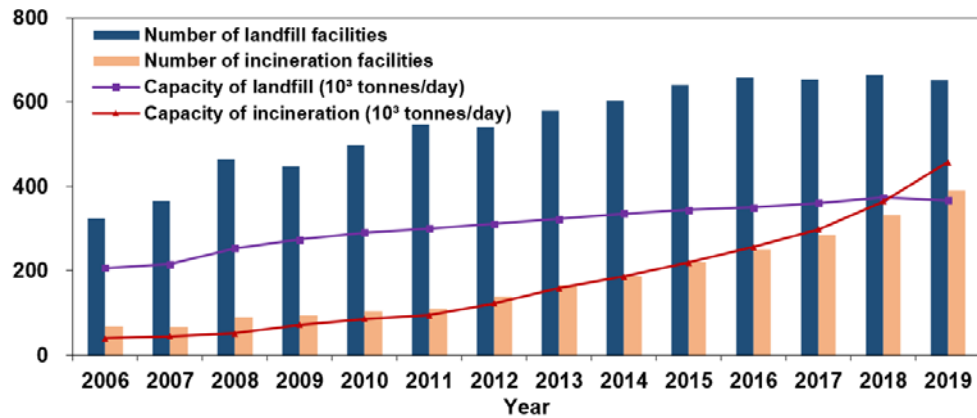
Notes: Standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$; clustered at the province level.



(a) Estimates of total MSW generation in China (1979–2019)



(b) Total number and capacity of MSW disposal facilities in China (2006–2019)



(c) Total number and capacity of landfill and incineration facilities in China (2006–2019)

Fig. S1 Development of MSW disposal facilities in China. (a) Estimates of total MSW generation in China (1979–2019); (b) Total number and capacity of MSW disposal facilities in China (2006–2019); (c) Total number and capacity of landfill and incineration facilities in China (2006–2019).

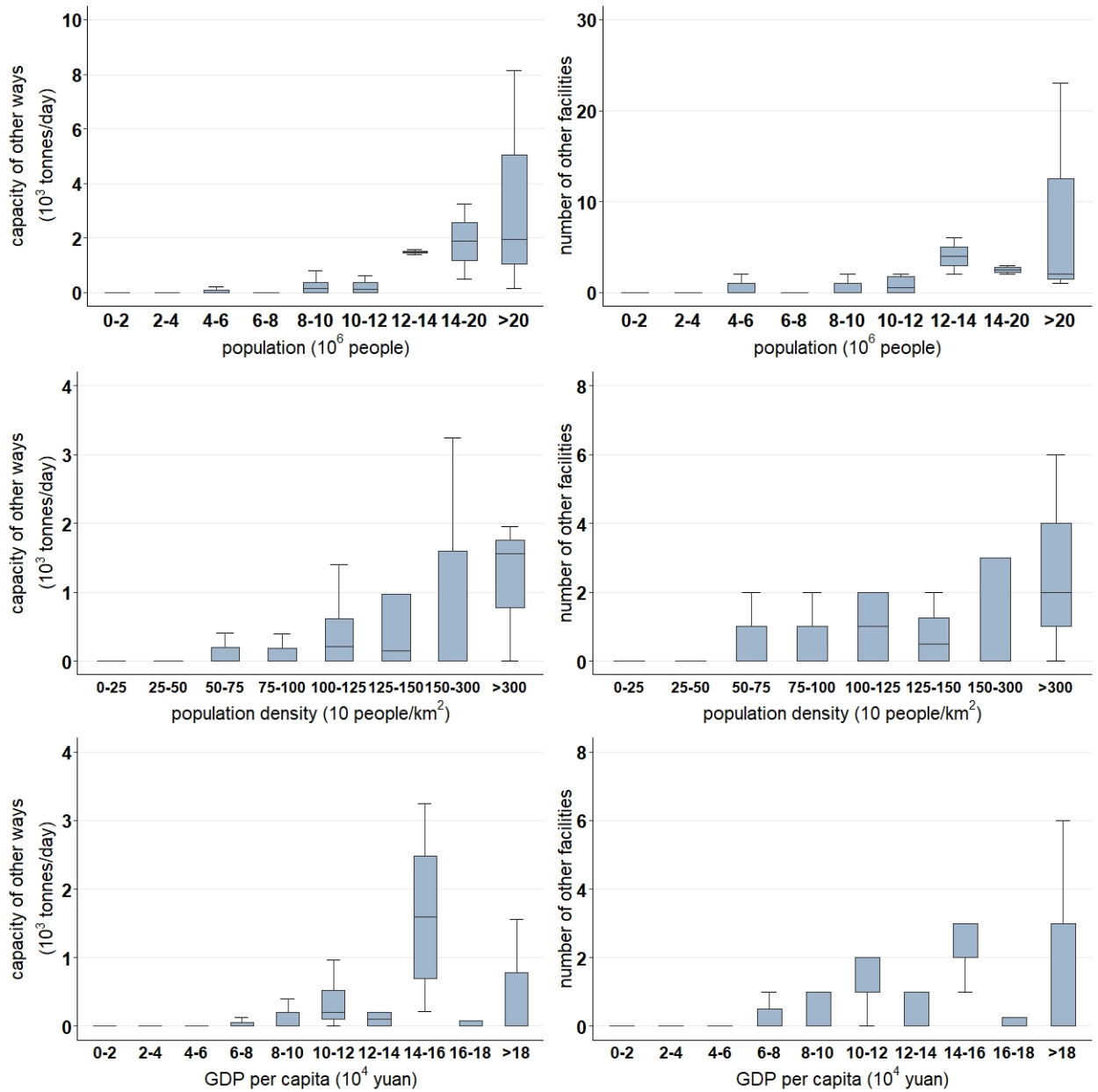


Fig. S2 Capacities (left) and numbers (right) of other MSW disposal facilities in Chinese cities in 2019.