Table S1. Area of pine wood nematode disease by county and city in Anhui Province by year.

City	County	Area（ha）				
		2000	2010	2020	2030	total
anqing	Daguan			364	681	1045
	Huaining		19	6874	9719	16612
	Qianshan			12526	36492	49018
	Susong			11257	6660	17917
	Taihu			5036	22971	28007
	tongcheng			1365	7208	8573
	wangjiang			2717	2855	5572
	Yixiu		324	79	283	685
	Yuexi			6868	36485	43353
bengbu	Longzihu				12	12
Chizhou	Dongzhi			86	346	432
	Guichi			1739	3616	5354
	Qingyang			1167	2100	3267
	Shitai			319	919	1238
Chuzhou	Dingyuan	21		1433	3884	5338
	Fengyang			2435	5716	8151
	Laian	226	143	412	951	1732
	Mingguang	3907	2210	6771	7862	20750
	Nanqiao	807	65	2188	4721	7781
	Quanjiao	153	30	361	1151	1695
	Tianchang	34				34
Hefei	Chaohu			805	2118	2924
	Feidong		96	322	531	949
	Feixi			348	519	866
	Lujiang			1155	3708	4863
	Luyang			4		4
	Shushan	4			0	4
huangshan	Huangshan			261	4107	4368
	Huizhou			569	2694	3263
	Qimen			387	1351	1739
	Xixian			2945	16904	19849
	Tunxi				388	388
	Xiuning			3600	11889	15489
	Yixian			168	572	740
Liuan	Shucheng			5327	13448	18775
	Jinan			243	1014	1257
	Jinzhai			2266	12231	14497

City	County	Area（ha）				
		2000	2010	2020	2030	total
	Shucheng	84		5665	7409	13159
	Yeji				142	142
	Yuan			608	1755	2363
Maanshan	Bowang			247	819	1066
	Dangtu	567	87	106	196	956
	Hanshan	76	155		1	232
	Hexian	313				313
	Huashan	466				466
	Yushan		192		29	221
Tongling	Congyang			1898	7578	9475
	Jiaoqu				56	56
	Tongguan			342	27	370
	Yian				219	219
Wuhu	Nanling			10	128	138
	Wuwei			43	227	270
	Wuhu				21	21
Xuancheng	Guangde	821	77	1795	3082	5775
	Jixi			1007	5916	6923
	Jingxian			3246	8300	11546
	Jingde			565	3029	3594
	Langxi				272	272
	Ningguo	373		716	1403	2493
	Xuanzhou	3	41	958	3917	4920
total		7857	3440	99605	270632	381533

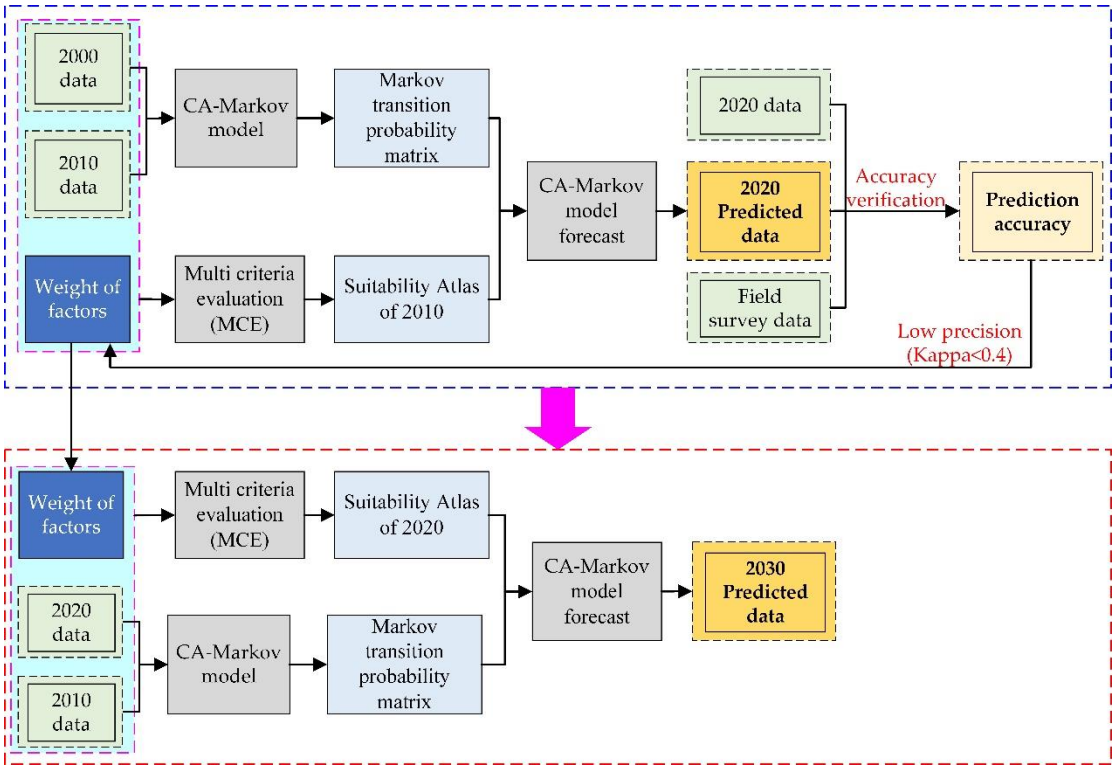

Figure S1. Workflow of PWD prediction based on CA-Markov model.