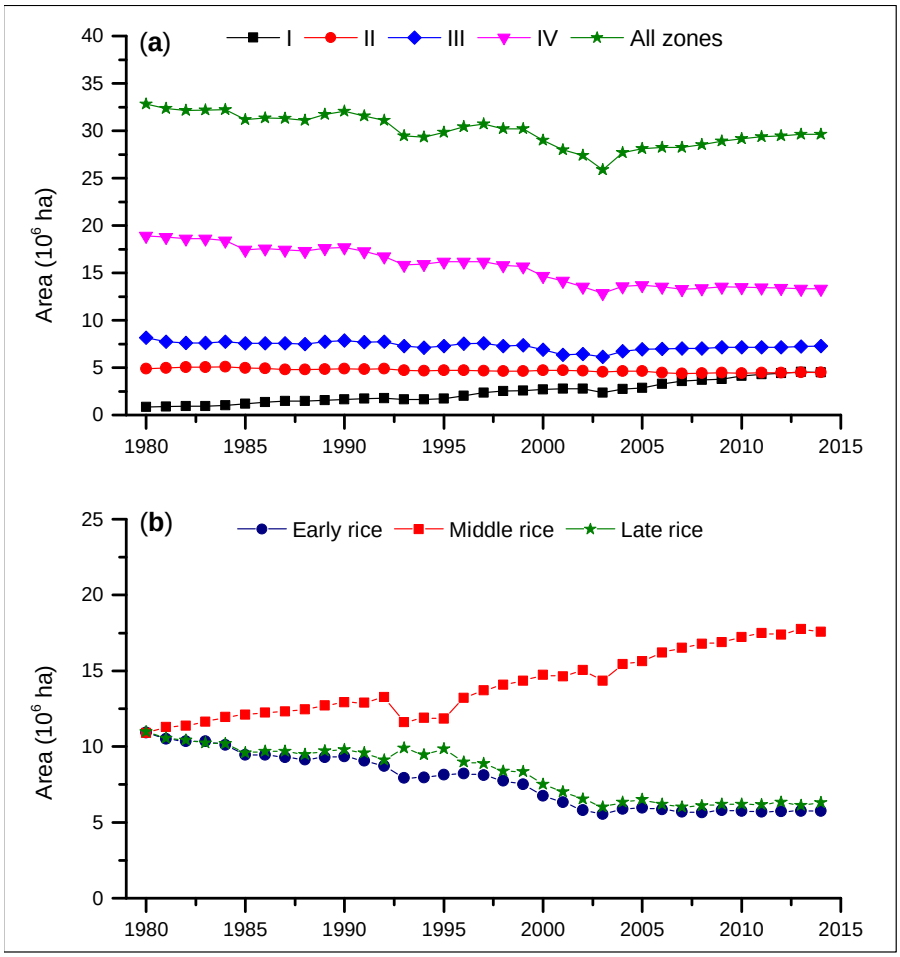
Appendix A The detailed information of coefficients used in the calculation of ESV

Ecosystem service functions	Equations	Coefficients	References
Temperature cooling	Eq.(2)	P_{TC}: 32.12 USD mm^{-1} ha^{-1}	(Liu *et al.*, 2015)
O_2 production	Eq.(3)	P_o: 0.06 USD kg^{-1}	(Liu *et al.*, 2015)
CO_2 reduction	Eq.(4)	P_C: 0.55 USD kg^{-1}	(Xiao *et al.*, 2011)
Flood mitigation	Eq.(5)	P_f: 0.23 USD m^{-3}	(Liu *et al.*, 2015)
Chemical pollution	Eq.(6)	V_{pr}: 0.010 USD kg^{-1} V_{eu}: 0.008 USD kg^{-1} V_{ni}: 0.002 USD kg^{-1} V_{fa}: 0.001 USD kg^{-1} V_{bi}: 0.003 USD kg^{-1}	(Li *et al.*, 2001)
Greenhouse gas emission	Eq.(7)	E_{CH4}: zone I: 115.9 kg ha^{-1}; zone II: 181.8 kg ha^{-1}; zone III: 251.8 kg ha^{-1}; zone IV: early rice 168.8 kg ha^{-1}; late rice 266.5 kg ha^{-1}. E_{N2O}: zone I: 0.0047 kg kg^{-1}; zone II: 0.0081 kg kg^{-1}; zone III: 0.016 kg kg^{-1}; zone IV: early rice 0.0035 kg kg^{-1}; late rice 0.0041 kg kg^{-1}.	(Yan *et al.*, 2003; Feng *et al.*, 2013)
	Eq.(7)	E_N: 1.3 kg kg^{-1} E_P: 0.2 kg kg^{-1} E_K : 0.15 kg kg^{-1} E_{AF}: 18.99 kg kg^{-1}	(Cheng *et al.*, 2011)
	Eq.(8)	P_C: 0.55 USD kg^{-1}	(Xiao *et al.*, 2011)

Appendix B The change of rice planting area during 1980-2014



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