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## Human's Consumption of Ecosystem Services and Ecological Debt in China

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Human's reckless consumption is depleting the world's natural capital to a point where we are endangering our future prosperity. Accounting ecological footprint, bio-productive capacity and ecological debt of China during 1980-2005 shows that China has encountered an increased ecological debt with its value of 1.02 ghm<sup>2</sup> in 2005 due to increased demand for ecological service of socio-economic metabolism especially on fossil fuels though its bio-productive capacity per capita doubled to 1.15 ghm<sup>2</sup>. Demand for ecological service, or ecological footprint, in 2005 exceeded China's earth's regenerative capacity by 89%. At the provincial level, 85% of China's provinces have been in ecological debt in the long term and now only three provinces of Hainan, Fujian and Xizang are in ecological surplus. China and most of its provinces are in soft ecological deficit due to the contradictions between ecological service supply and demand in spatial, temporal and components structural dimensions. Such a type of ecological debt might be mitigated or eliminated by appropriating the current or future global commons or buying hidden ecological service through international or interregional trade channel. China is heading for an ecological credit crunch as the integrated consequence of its natural constraint of land use base to bio-capacity and rapid economic growth. Against the backdrop that natural capital has been among the limiting factors to world's economic development, China earnestly established the scientific development concept and implemented multiple effective activities to reverse ecological 'credit crunch' and curb ecological recession.

【Key Words】 : **ecological footprint ecological deficit consumption of ecosystem services ecological credit crunch**

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