Effects of the CDM on poverty eradication and global climate protection

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Abstract: In an impure public good model we analyze the effects of CDM transfers on poverty as well as on the global climate protection level. We construct an analytical model of a developing and an industrialized region, both of which independently seek to maximize their utility - a function of private consumption, domestic air quality, and global climate protection.
They do so by distributing their finite expenditures across (1) the aggregate consumption good, (2) end-of-pipe pollution control technologies, and (3) greenhouse gas abatement. Based on our analytical findings, we develop two sets of simulations for China in which we vary the rate of the CDM transfer. The simulations differ by the assumption of China's domestic air quality policy - the first assumes a technology-standards policy which fixes a level of end-of-pipe SO2 control, whereas the second assumes a technology-neutral policy which simply fixes the level total SO2 emissions.