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**Modeling land-use change in the Volta Basin of Ghana**

Land change studies in a 5,400km<sup>2</sup> area within the Volta Basin of Ghana were carried out using satellite image and socio-economic analyses. The dominant change process was conversion of natural vegetation to cropland at an annual rate of 5%. Reversible land change trajectories involving accumulation of woody biomass indicate a certain level of rainfall-induced ecosystem resilience. Linear and logistic regressions identified agricultural land suitability, distance from main market and localities, child-dependency ratio and population density as the main drivers of change. Policy measures that would relieve human pressure on vegetation resources, guarantee food supply and promote commercialization of agriculture are suggested.