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Land-use, ecosystem carbon and biodiversity in 11 landscapes around the tropics

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Land-use in large areas of the tropics is changing faster than ever before and this is drastically affecting carbon storage and other ecosystem services. We studied how carbon stocks are changing, how this can be influenced with financial incentives and what are the biodiversity implications of these changes in 11 landscapes around the tropics and compared these to changes in 2 boreal landscapes. To start, we developed a simplistic ecosystem carbon computation tool, CarboScen, and parameterized it and finally assumed some hypothetical business-as-usual land-use scenarios. We have published the results on potential to increase ecosystem carbon and are currently analysing data on biodiversity implications. Greatest potential to increase ecosystem carbon was in sparsely populated landscapes with high initial ecosystem carbon density.