Amazon sugarcane: A threat to the forest

Amazonia's vegetation ranges from dense forests to savanna areas, and the region's forests and their biodiversity are vulnerable to the ongoing advance of land-use change for agriculture and ranching (*1*). In Brazil, cultivation of sugarcane is currently prohibited in the Mato Grosso wetlands (pantanal) and Amazonia regions (*2*). Sugarcane is among the crops with the highest production increases in the past decade, and Brazil is the world's largest sugarcane producer according to data of Food and Agriculture Organization of the United Nations (*3*). The cane plantations are projected to increase due to demand for biofuels (4). Sugarcane plantations have been shown to threaten biodiversity, their effects extending beyond the cultivated areas to adjacent forests (*5*). The Brazilian Senate has scheduled a decision for 2018 on a bill that proposes opening the Amazon region to sugarcane (*6*). This crop would supposedly be planted in degraded fields, in natural Amazonian grasslands, and in the biodiversity hotspots of the central Brazilian savannas (cerrado). Because of the potential catastrophic effects on the Amazonian forest, the biodiversity and ecosystem services of South America, and the agricultural productivity of Brazil, we urge the Senate not to pass this bill.

The threat of sugarcane is just one among Amazonia's many strong drivers of destruction (*4*). Amazonian forests play an important role in the climate of South America, with substantial rainfall contributions to agriculture in southeastern Brazil (*7–8*). In the medium and long term, forest loss would threaten Brazil's own agricultural and biofuel production, given that the area with the greatest agricultural production in the south and southeast of the country (*9*) and depends on water vapor from the Amazon region (*7–8*). Political decision-makers and national and international institutions that fund large agricultural enterprises should not be fooled by the sweet taste of a new agricultural frontier to be exploited. They should instead be guided by the need to avoid loss of Amazonia's biodiversity, genetic heritage, and valuable ecosystem services, including climate regulation for the area with the largest population and agricultural production in South America (*9–10*).

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