Improving sugarcane ethanol production -- the 'midway' strategy

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An article in the current issue of *Global Change Biology Bioenergy* reviews the history and current state of ethanol production of sugarcane in Brazil and presents a strategy for improving future ecosystem services and production.

Researchers introduce a new approach that prioritizes a sustainable and responsible way of producing ethanol called the "midway" strategy. This innovative strategy involves producing the necessary biotechnology to increase biomass yield and ethanol production. Agricultural expansion will be further reduced by improving sugarcane management. This strategy will effectively minimize the impacts of sugarcane bioethanol production on biodiversity while synergistically protecting and regenerating rainforest.

According to Marcos Buckeridge, Professor of the University of Sao Paulo and Scientific Director of the Brazilian Bioethanol Science and Technology Laboratory, "Brazil is now in a privileged position because of its opportunity to introduce a new style of crop production with a much higher level of sustainability. The midway strategy should be applied not only for sugarcane, but for all crops."

Successful implementation of the "midway" strategy will require three key components: scientific research to understand sugarcane biology and ecology, technological development of genetically improved sugarcane crops and production technologies, and creation of policies that support sustainable land management.

Buckeridge further notes that, because Brazil has a stable economy and is the world leader in sugarcane ethanol production, it is in an excellent position to implement the midway strategy.

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