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### **Prospective impacts of sugarcane burning suppression: the agro-environmental contributions of the Green Protocol to sustainability. (cod. 487)**

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Energy production at competitive costs and with low impact on the environment is a major challenge nowadays. Some policies have been implemented for this purpose in recent years. Noteworthy is the initiative of government of São Paulo state in 2002 enacted Law 11,241, regulated by Decree 47.700 establishing the technical parameters for the continuity of agronomic management of straw burning. Expanding the scope of the agro-environmental Protocol for the Sugar and Ethanol Industry, the main objective is to extinguish the burning of the straw. This article aims to point out the impacts of an abrupt decision to eliminate the burning of sugarcane. With this purpose it was performed a critical analysis of technical literature and documents. Whereas the injunction to suspend the sugarcane burning Judicial Section of Piracicaba which covers 20 municipalities with significant production of sugarcane for sugar industry. With superior to 210,000 hectares under cane cutting and 38,000 hectares of sugarcane plant training, 95,000 hectares are still not under mechanical harvesting, representing amount of sugarcane 7.59 million tons harvested in the 2010/11 season. Therefore, the burning of the straw was still practiced in the region, since the percentage of mechanized farming was only 60%. Difficulties in mechanized harvesting of sugarcane in this section due to property size in these municipalities, where 85% of the areas are less than 100 acres. This pattern of land ownership imposes formal organization of suppliers aiming to decrease cost of implementation machineries and equipment to harvest. The average productivity per day-worked in manual cutting that reached Judicial Section 7.9 ton / worker. Whereas 130 days crop productivity with this, to require allocation in cutting sugar cane per harvest of 6,901 workers, declining to 5,061 men if the harvest period is extended to 180 days. This number of workers, considering both estimates of occupancy, results in wages of R\$ 22.54 million or R\$ 27.58 million, for 130 and 180 days of harvest, respectively. The immediate suspension of straw burning, directly affects this number of workers that under the enforcement of prohibition should seek their livelihood in other activities. In this question lies the social dilemma of suspension burning, and alternatives to the labor excluded. On the other hand, the work of cutting and grouping of sugarcane culms is the most strenuous in Brazilian agriculture, therefore, technically and humanly untenable. Despite the negative impacts of the end of burning, experts consider this an ally to agricultural producer to achieve sustainability. But it is also consensus that a process of broader innovation in sugarcane production systems could make it more efficient and sustainable, mitigating those impacts caused by the implementation of mechanization without planning or government policies support.