

Reduction of Pollution and Diseases Through A Law to Prohibit the Burning of Sugarcane

Jaime Cuauhtemoc Negrete*

Agricultural Machinery Engineer graduated in Autonomous Agrarian Antonio, Mexico

***Corresponding author:** Jaime Cuauhtemoc Negrete, Agricultural Machinery Engineer graduated in Autonomous Agrarian Antonio, Mexico



ARTICLE INFO

Received:  March 27, 2019

Published:  April 03, 2019

ABSTRACT

Citation: Jaime Cuauhtemoc Negrete. Reduction of Pollution and Diseases Through A Law to Prohibit the Burning of Sugarcane. Biomed J Sci & Tech Res 16(5)-2019. BJSTR. MS.ID.002900.

Introduction

The sugar industry in Mexico represents a colossal economic, social, industrial and food, and its exponents the sugar mills are highly polluting the environment by the old processes that are still used from the field work as the burning of the crop for facilitate their harvest, up to the manufacturing processes of the sugar grain. The need to attack this issue is then visualized to obtain alternatives that provide sustainable solutions for this current problem. For this reason, in Mexico, a law should be promoted to prohibit the burning of sugarcane due to the advantages that this action offers for the country and for the inhabitants by reducing pollution, diseases and increasing employment and, for the metal industry mechanics, by allowing the development of a manufacturing industry for sugarcane harvesters.

Literature Review

The burning of the cane fields predominates in the harvest of both manual and mechanical sugar cane. This burning technique generates problems of an environmental, economic, technological and social nature, so it is urgent to promote the harvest of green cane and simultaneously introduce technologies and methodologies for the management and profitable and sustainable use of crop residues. Several advantages of the harvest of green cane have been achieved in sugar extraction operations of the mill, among which can be mentioned; higher sugar recovery per unit area of land, better management of harvesting operations and a reduction in the number of transport units [1,2]. indicates that when burning sugarcane, as a pre-harvest activity, there are a series of environmental problems such as air pollution increasing the rates

of gas emissions to the atmosphere causing a greenhouse effect, but not only the air is affected at the time of the burning of the cane if not also the soil and the health of those who live near these places. In practically the entire sugar world the plant is burned to harvest commercial plantations, with a few exceptions such as Cuba, Australia, South Africa and some regions of Brazil [3].

In Colombia in 1995 the Colombian Ministry of the Environment, published a Decree (No. 948 of 1995) in which agricultural burns are prohibited as of 2005, forcing the Colombian sugar industry to propose technological strategies to meet this objective. In Brazil, a country in which the matter of burning sugar cane plantations, there are regions such as the Center-South, properly in the States of São Paulo, Minas Gerais and others, where great efforts are made to eliminate burning, which has been very successful in Riberão Preto. In the Northeast, States of Pernambuco, Alagoas, Bahia and others, the practice of burning is widespread and entrenched. A plan to systematically eliminate burning is currently being implemented. Said Plan is regulated in Law No. 11.241 sanctioned by the Governor of the State of Sao Paulo on September 20, 2002. The sugar industry of Mexico does not establish any type of express prohibition to burn cane. The regulations are the common norms established for the burning of vegetable waste, so there is no type of prohibition for the practice of burning sugarcane. Burning affects human health, due to the ash and the gases generated nearby populations have cardiovascular diseases, chronic bronchitis, bronchial asthma, among other respiratory problems. In addition, there are some carcinogenic compounds that are released to the burning of carbon and chlorinated compounds and that probably will be evident in a

few years [4]. In order to eliminate it, the mechanization of the green harvest must be promoted, encouraging the design, manufacture and testing of mechanized harvesters of sugarcane.

In order to eliminate it, the mechanization of the green harvest must be promoted, encouraging the design, manufacture and testing of mechanized harvesters of sugarcane. because this is the main issue because without them it is impossible to eliminate the burning of sugarcane [5].

Conclusions and Proposal

[4,6,7] conclude that the burning of sugarcane increases climate change and the diseases of the population in places close to where sugarcane is burned. to promote a law to prohibit the burning of sugarcane because of the advantages that such action offers for the country for the inhabitants by reducing pollution and diseases and increasing employment. therefore, the following preliminary draft law is proposed [8,9]:

- a) Article 1-It is prohibited the burning of sugar cane having to be implemented gradually.
- b) Article 2-The National Institute for the Mechanization of Sugar Cane will be created, where the development and design of machines for the mechanical harvesting of sugarcane will begin.
- c) Article 3- The establishment of assembly and manufacture of cane harvesters of foreign companies will be encouraged, granting them advantageous facilities.
- d) Article 4- Credits will be granted for the importation of cane harvesting machines from all over the world, previously

tested and authorized by the Institute for the mechanization of sugarcane.

- e) Article 5-Companies that commercialize cane harvesting machines must commit to maintain a stock of spare parts for at least 10 years.

References

- Ortiz LH, Salgado GS, Castelan EM, Cordova SS (2012) Perspectivas de la cosecha de la caña de azúcar cruda en México Rev Mex Cienc Agríc p. 3.
- Ripoli T (2000) Energy potencial of sugar cane biomasa in Brazil. Scientia Agrícola 56(4). Piracicaba Brasil.
- Chaves SM, Bermúdez LZB (2006) Regulaciones Internacionales Sobre Quema de la Caña de Azúcar. XVI Congreso de la Asociación de Técnicos Azucareros de Centroamérica (ATACA) y XVI Congreso de la Asociación de Técnicos Azucareros de Costa Rica (ATACORI) Heredia Costa Rica pp. 261-266.
- Silva (2014) Consecuencia ambiental de la quema extensiva de la caña de azúcar.
- Negrete (2018) Anteproyecto de ley de prohibición quema de la caña de azúcar. Editor the Author Mexico.
- CCA (2014) La quema de residuos agrícolas: fuente de dioxinas, Comisión para la Cooperación Ambiental Montreal Canadá 6.
- Davalos (2007) La caña de azúcar: una amarga externalidad? Desarrollo Y Sociedad Primer Semestre De 117-164.
- Barroso LA, Vilaboa I (2013) Contaminación ambiental por quema de caña de azúcar. Un estudio exploratorio en la región central del estado de Veracruz. October 2013 Conference: Think Green 2013: Crecimiento verde, retos y oportunidades para México.
- (2018) La producción de caña de azúcar supera los 55 millones de toneladas en 2018.

ISSN: 2574-1241

DOI: 10.26717/BJSTR.2019.16.002900

Jaime Cuauhtemoc Negrete. Biomed J Sci & Tech Res



This work is licensed under Creative Commons Attribution 4.0 License

Submission Link: <https://biomedres.us/submit-manuscript.php>



Assets of Publishing with us

- Global archiving of articles
- Immediate, unrestricted online access
- Rigorous Peer Review Process
- Authors Retain Copyrights
- Unique DOI for all articles

<https://biomedres.us/>