

Title : Sugarcane Burning - A Potential Cause of Disease in Affected Individuals of Households in Uitvlugt and Ogle, Guyana

Abstract

The sugar industry is one of the earliest and most successful users of biomass for commercial energy production. Sugar cane harvesting by burning is an environmental health issue due to respiratory effects of smoke. The present study is to investigate the current situation concerning sugarcane burning as a potential cause of disease in affected individuals of households in Uitvlugt and Ogle, Guyana. A total of 50 households investigated at each study site, results showed that there were no chronically exposed households to sugarcane smoke and soot for the study site used as the control when compared to the study site at Ogle and Uitvlugt. Out of 50 a total of fifteen households investigated at parfait harmony which reported the presence of respiratory disease within their households; asthma and bronchitis was the most commonly reported. Ogle showed the least number of nine, and Uitvlugt showed the highest number of twenty three, both with asthma being the most common. Uitvlugt showed a complete total of fifty households reporting dermatological problems, they all complained of unbearable itching when exposed to the sugarcane soot. Ogle reported one incidence of this, and Recht door zee (control site) reported nil. In the case of cardiovascular problems, Uitvlugt showed the highest incidence of thirty seven, and both Ogle and Recht door zee (control site) showed five. Cancer was reported by nine households in Uitvlugt, two in Recht door zee (control site), and nil in Ogle. To conclude, there is a high prevalence of chronic exposure to sugarcane smoke and soot in Uitvlugt, and negligible prevalence of chronic exposure to sugarcane smoke and soot in Ogle. There is a high prevalence of these diseases in Uitvlugt, followed substantially less by Recht door zee (control site), and Ogle having a very small prevalence. Keywords: Sugarcane; respiratory diseases, cardiovascular problems, Cancer.

For more details :

https://www.researchgate.net/publication/346819133_Sugarcane_Burning_-_A_Potential_Cause_of_Disease_in_Affected_Individuals_of_Households_in_Uitvlugt_and_Ogle_Guyana