



## **EXPANSION AND SOCIO-ECONOMIC AND ENVIRONMENTAL IMPACTS OF SUGARCANE IN THE GOIÁS NORTHERN REGION**

Gabriela Nobre Cunha 1 Iransé Oliveira Silva 2

The occupation increased area regarding sugarcane Goiás state is due to sugarcane harvest being mechanized and with high investments in technology, leading sugarcane one of the main segments within the economy, thus Goiás sugarcane is blowout over 193 municipalities and Southern mesoregion concentrated 75.03% production, followed by the Central mesoregion (19.88%), East (4.35%), North (0.66%) and Northwest (0.08%), in 2010. This study aimed to evaluate sugarcane cultivation expansion, its socioeconomic and environmental impacts in the Goiás Northern region, and its economic viability power plant municipality of Uruaçu - GO. Bibliographic research was conducted, in addition to production data collection of and harvest from the National Supply Company (Conab) and data of the cultivated area, productivity, production, and gross revenue of sugarcane in northern Goiás from 2010 to 2019 with the Brazilian Institute of Geography and Statistics (IBGE). The sugarcane expansion plantations from 2010 to 2019 in the North mesoregion show a significant increase of approximately 57.06, 57.80, 57.83, and 70.59% in the planted area, productivity, production, and gross revenue, respectively. The sugarcane industry generated positive effects on employment and income, did not observe significant positive impacts on the environment, health, and education, and can highlight that the impacts generated by this sector occur basically due to deforestation and fires. The socioeconomic and environmental impacts in general caused by the sugar-alcohol sector in the Northern region of Goiás can be considered of medium or high relevance, mainly due to the industry located in this region still presenting little investments to minimize these impacts, concentrating its investments (60%) basically on mechanized operations and consumed materials.

**Keywords**: sugar-alcohol sector; microregion; sustainability; income.

Doutoranda em Sociedade, Tecnologia e Meio Ambiente, Universidade Evangélica de Goiás - UNIEVANGÉLICA, E-mail: gabriela-nc@hotmail.com

Doutor em Educação Física, Universidade Evangélica de Goiás - UNIEVANGÉLICA, E-mail: iranse.silva@unievangelica.edu.br