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Productivity and Efficiency Change of Small-scale Sugarcane Growers in Amatikulu and its Policy-related Sources, South Africa

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ABSTRACT This study aimed to decompose productivity and efficiency change and also investigated the determinants of Total Factor Productivity (TFP). Secondary data for a sample of 38 small-scale sugarcane growers was applied covering the period 2013 to 2016 in the Amatikulu region in KwaZulu-Natal Province of South Africa. The results of the Färe-Primont Index revealed technological progress–driven TFP and mix efficiency, technical and scale-efficiency has retracted annual growth in small-scale sugarcane productivity while other components revealed mixed results. The policy-related variables analysed by the Bayesian Averaging Modelling approach revealed the link between the experience and education of the farmer and sustainability investment as sources of TFP growth and further confirms that improving Research and Development (R&D) may increase TFP productivity. The paper concludes that both productivity and efficiency need to be improved without increasing the size of plots as well as increasing extensions visits to the farms.