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Economic Efficiency of Tomato Production Systems in the Dry Season in North-eastern Benin

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Abstract

The objective of the current study to analyse the economic efficiency of market gardeners under different production systems in the dry season, specifically tomato producers in the municipality of Malanville, Bembéréké and Parakou in north eastern Benin. To carry out this study, a survey was conducted among two hundred and fifty three (253) tomato producers. This sample is distributed in nine (09) different districts of the three municipalities of the study. The survey sample consists of both men and women. The indexes of technical and allocative then economic efficiency were estimated by the statistical analysis software R”.

According to the studies of BIAOU P. et al (2018), there are two different systems (S1 and S2) of tomato production in the dry season in the study area.

Market gardeners in the S2 system are economically efficient compared to those in the S1 system.

The regression carried out in order to find the factors likely to determine the effectiveness revealed that variables, religion of the respondent, belonging to an association or group, level of education, followed by a diploma training and system of culture positively determine the economic efficiency of system 1 gardeners while the variable number of years of high schooling determines it negatively. As for the vegetables gardeners in system 2, the female sex and education variables negatively determine economic efficiency, while those following of a diploma training and number of years of schooling positively determine it. Taking into account these two categories of system producers, it can be founded out that these producers are very different.

Key words: Allocative efficiency, technical efficiency, economic efficiency

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