Abstract

México is the seventh world corn producer, in 2011 production reached 14.9 million tons. Despite of this production level, Mexican Republic is the second largest importer as it needs 10 million tons to meet mexican requirements. Main factors that have influenced are higher demand due to population growth, and higher input costs. Therefore, it is necessary to develop models to generate economic information for better agribusiness decision making, as expenses can be identified. This issue is becoming more important as price of fertilizer and fuel have increased considerably during the last years due to higher oil prices. The objective of this was to determine economic situation of Chihuahua state irrigated corn farms, taking as a base year 2011 of two corn Units of Rural Production (URP), 50 has (CHMR50) and 100 has(CHMR100) on the Cuauhtémoc region. An econometric simulation model MexSim© was used to analyze panel information from the URP before mentioned. The results were as follows: CHMR50 yield 8 ton/ha income $1.6 million pesos (mp), expenses $1.01 mp, net income $0.63 mp, IRR 15.9%, NPV $0.4 mp. CHMR100 yield 9.5 ton/ha, income $3.1 mp, expenses $1.9 mp, net income $1.2 mp TIR 12.5, VAN $-2.3 mp. Results shown a better economic performance of minor scale URP, although, lower net income, the values of IRR and NPV were better. In both cases fertilizer costs are the main cost proportion, however, they are higher on the bigger URP. It leads to the need of check the amount of fertilizer used.

Keywords

Microeconomic Analysis, Production Efficiency, Simulation Models.