

ملخص البحث باللغة الانجليزية :

Due to the limited cropped area of agricultural lands and the limited horizontal expansion disproportionate to the population increase. The issue of food security, crop consumption rates, and self-sufficiency is considered one of the most important problems facing countries that seek to improve sustainable agriculture and economic development to eliminate poverty or hunger. This research aims to use data mining classification techniques and decision tree algorithms to predict the food security status of strategic agricultural crops (e.g., wheat) as an Agro intelligence technique. Also, the outputs and extracted information from the prediction process will help decision-makers to take an appropriate decision to improve the self-sufficiency rate of wheat, especially in epi-demic crises and hard times such as COVID-19, political, and economic disturbances. On the other hand, the research investigates the patterns of wheat production and consumption for the Egyptian population from 2005 to 2020. This re-search presents a methodology to predict the food security status of strategic agricultural crops through the case study of wheat in Egypt. The proposed model predicts the food security status of wheat with an accuracy of 92.3% to determine the self-sufficiency ratio of wheat in Egypt during the years from 2015 to 2020. Also, it identifies the factors affecting the food security status of wheat in Egypt, their impact on determining and improving the food security state and its rate of self-sufficiency.

البحث مشتق من رسالة علمية

يقع البحث ضمن مجالات البحث بالقسم العلمي

عميد الكلية

أ.د/ محمد حلمي عبد العزيز خفاجي