

عنوان مقاله:

Forecasting Sugar Beet Production in Turkey Using the Box-Jenkins Method

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خلاصه مقاله:

Turkey is a favourable country for sugar beet production due to its climate and soil composition, and it holds a significant position among the countries producing sugar beet. Therefore, in this study, an Autoregressive Integrated Moving Average (ARIMA) was used to project the sugar beet production values for Turkey over the next ten years. The most effective model structure [ARIMA (۲, ۱, ۳)] was created for this purpose using data from ۱۹۲۵ to ۲۰۲۰. The years ۲۰۱۹ and ۲۰۲۰ were utilized as the model's validation years. When the observed and expected sugar beet production values are compared, the data indicates that the predicted values are slightly lower than the actual ones. The results also show that by ۲۰۳۰, sugar beet production in Turkey would reach ۲۰.۵ million tons. This research may help policymakers plan for the storage, export, or import of sugar beets. Also, by using these data, resource waste can be avoided.

کلمات کلیدی:

.Autoregressive Integrated Moving Average, ARIMA, Beta vulgaris L., Output prediction

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