

Rice Price Prediction

CM 3720 - Machine Learning

215514G - Bandara W.U.P.K





Problem

In Sri Lanka, the rising price of rice is a highly discussed topic at present. Nowadays and most of the people are pointing towards the industrial Mills, that they are increasing the price to gain higher profit. The real issue is they hiding the details of actual expenses about the process of making rice from paddy.



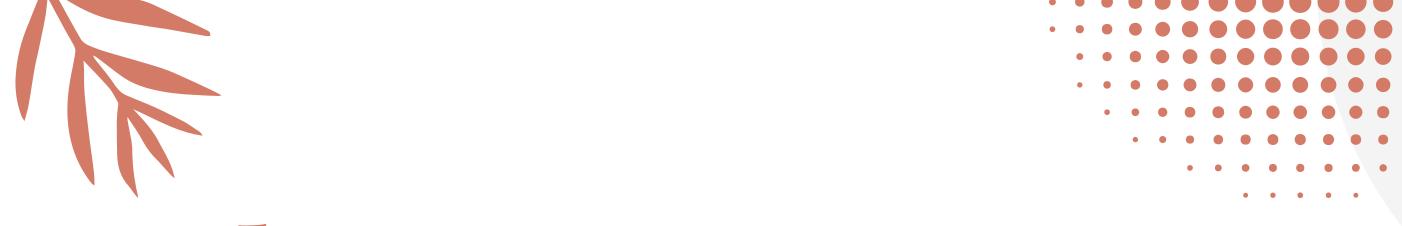
Proposed Solution

Analyze the price fluctuations during last 27 years (1996-2022)

targeted Features:

- paddy collection prices
- paddy productiontotal rice needs
- Exchange rate
- Fuel price
- Monetary Aggregations
- Date

Let's try to predict the price for upcoming months based on above features



Advantages

- predict the price based on technical and scientific basis
- Can control the conditions to maintain the price at a constant amount
- Reduce gaining highr profit by the industrial mills





Model

Tried with

Random Forest

- Averaging (reduce varience)
- Parallel
- less prone to overfitting
- understand highly influencing features
- high accuracy

XGBRegression

- Weighted combinations for weak learners
- Sequential
- less prone to overfitting with tuning
- reduce bias
- high accuracy





Let's see the Demonstration



• • • • • • • • • • • • • • •

Thank Tyou

