MSc Project Report

Price Prediction Model for Sri Lankan Tea Industry Using Machin Learning

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Abstract

Ceylon Tea is one of the most important industries to Sri Lankan economy, not only because it brings substantial amount of foreign currency to Sri Lanka, but also it creates a tremendous amount of jobs directly and indirectly towards Sri Lankan market. Unmatched quality of Ceylon Tea across the globe keep the demand for nations tea keeps rising day by day, there are a lot of rules and relations are imposed and monitored by several organizations inside the island in order to make sure the high quality of its prime source of foreign income.

However, despite the demand for the Ceylon tea, tea production in the island is rapidly dropping due to the financial challenges faced by the manufacturers. One of the fundamental reasons for the financial crisis faced by the producers is the advance amounts paid by tea brokers to the tea producers without proper appraisal of tea. Further the producers don't equip with accurate mechanism to plan their production as per the market demand, where the producers struggle to optimize its resources effectively.

This research is focused on developing a mechanism to forecast the value of tea lots, in advance a particular tea grade arrives at auction room. This system is highly applicable to the tea brokers, through this system it has facilitated a mechanism to effectively forecast the price of tea lots as well as advise the manufacturers regarding the production planning, which will ultimately enhance the revenues for both parties. This model is a hybrid model with the combination of regression and time series.

Keywords : Ceylon Tea , Price Prediction , Time series forecasting , Tea Price