

Abstract

The sugar industry is important because it is responsible for supplying the world with sugar, which is used in many types of dishes and products, and sugar in itself is an important part of the human diet. Sugar is also found in many staple foods. The world produces 170 million metric tons of sugar every year. Brazil was the top producer and exporter of sugar in 2013-2014. The United States produced 7.67 million metric tons of sugar in 2013-2014. For the crop year of 2014-2015, the Philippines produced a total of 2,323,817 metric tons of raw sugar that came from 416,893 hectares of sugarcane. The yield per hectare was 111.48 Lkg/Ha. In the same crop year, 1,076,382 metric tons of sugar were produced. .With this, it can be seen that the sugar industry is very important especially for a country like the Philippines.

This paper presents the development of a Sugarcane Production Monitoring and Farmer Assistance System for Sugar Regulatory Administration. The system covers the processes of SRA that relates to data gathering, processing and assistance.

Based on the observations and interviews conducted, the proponents have found that the main problem encountered by the company is that they are having difficulty in providing appropriate programs and recommendations to farmers.

The main objective of this study is to assist the agriculturists and mill district officers in deciding and providing recommendations to the farmers faster. Another objective is, to help the board of directors decide what programs to provide for the farmers based on the problems that farmers are encountering. The methodology used in this study was Agile. the tools used were Netbeans, JQuery, BootStrap, Android, HighCharts and MySQL. A user acceptance test was conducted for the users of the system and the results were good. The proponents conclude that the proposed system would be beneficial for the sugarcane farmers both long term and short term in terms of their productivity. The system would also be valuable for the organization for they would be able to focus on the root problems and key results.