



## 11.0 Conclusion and Recommendation

The proposed Decision Support System would greatly benefit SRA especially in their extensions services to the farmers. The system will help the mill district officer assist and monitor the farms within his district better. Communication between mill district officer and farmer will also improve with the use of the mobile application. The crop estimate is automated which can help the user evaluate different forecasts when they conduct their own tests. The proposed system is ready to be installed on the offices' computer since system testing has been conducted to ensure proper installation. The mobile application will be installed on the farmer's phone and they can be registered in the system so that the mill district officer can monitor them. Internet connection will be used to properly connect the web and mobile application. The mobile application based on our research is feasible because most of the farmers do in fact, have their own smartphones in which the mobile application can be installed. Farmers who do not own a smartphone can be provided one. For the rest of the farmers who do not have access to a smartphone, the mill district officer himself can use his own version of the mobile application to survey. The proposed system may also be of help to other agricultural sectors. This can be used as a reference for future researches that relates to agricultural decision support systems.

The researchers recommend that SRA make use of this prototype and paper to come up with an enterprise system to assist them in decision making to not only cover research and development but also other business processes. The system could also be customized to meet the needs of other agencies that handle different crops. It can also be used as reference for other agricultural support systems since it has similarities in terms of the process of data gathering and farm comparisons. The crop estimate formula can be further enhanced with the use of more field data gathered from GIS and other geographical tools such as, remote sensing and LIDAR. The researchers also recommend that the proposed system be studied further, especially in terms of the crop growth of sugar cane and other crops. These can help future researchers in improving the overall capabilities of agricultural systems and be used as a way in understanding how a system can be used as a tool by agricultural organizations and agencies for aiding farmers. The researchers would like to recommend additional modules like a fertilizer recommender module to future researchers. This module would enable the system to process soil data and generate recommended fertilizers for the soil samples. This would be very beneficial to the crop estimate since more data could be utilized to improve the forecasts.