**Appendix Q Case Scenario**

**1.0 The MDO logs-in to the system during milling phase.**

Once the MDO logs in, he should be able to see the weekly production of the district. During the end of the week of this phase, the user(MDO) will have to create a crop assessment report based from the weekly production. The MDO will state his analysis for the week regarding the production performance of the district. The MDO can view the current crop years production,harvested area, and yield of the municipality,barangay and farmer using the treemap.

The MDO goes to the Crop Calendar page where he is to set the initial dates for the starting and ending of the crop growth phases for the next year.

The MDO from the homepage is allowed to click to see the summary details of a municipality. From there, the MDO can determine which barangay is doing better than the average performance. If the barangay is not doing better than that of the average performance, the MDO can select the barangay to view the barangays’ summary details. The details shown can further help the MDO determine which farmers are underperforming and those that are doing well in the barangay. The MDO drills down to view the farmer profile where he can see the details of the farmer and his fields. The MDO can select a field to which he can see the complete details and properties of that farmer's field. The MDO can choose to either use the provided action tools or create an observation. If the chooses to select the action tools; he is provided with selection to either send a recommendation or determine a problem. If he chooses to create an observation; he is provided with a search bar where he can select tag/s to which the system will search for similar fields with the same details as your initial selected field.(e.g. Area, barangay, etc.) . The MDO is to select the fields he wants to do a direct comparison and the create an observation. On viewing the comparison, the MDO uses his experience and the provided details to determine what recommendations or problems he will provide or determine to a farmer/s. On selection of a number of fields;If he clicks send related recommendations, he can view the recommendations from the selected fields to which he can choose to change the default message and send the selected recommendation to the owners of the selected fields. If he chooses to click the send other recommendations, he would be shown the full list of recommendations. There, he can send those to the selected fields. Lastly, if he chooses to click determine problem, he can view the the full list of problems and select which to send to the selected fields. Once the MDO has used an action tool, the corresponding notification is sent to the farmer of the selected fields. The farmer can then click the notification and view the sent recommendation/s or problem/s. The farmer has a choice to accept or reject the recommendation/problem. If accepted, the recommendation/problem will be added to his fields and can be viewed in his mobile application. If the farmer rejects, it can mean that the farmer does not have the problem or already has the recommendation sent by the MDO earlier.

**2.0 The MDO logs in to the system and it is not the milling phase.**

When the MDO logs in to the date not in the milling phase, the treemap will only show the historical production data. The weekly production data will not be shown in the homepage and neither the crop assessment. The MDO can adjust the dates of the crop calendar for the current crop year if necessary. The MDO is to go to the crop estimate page, In that page, he can see the generated initial estimation of the current crop year and select the estimation he wants to use for the crop assessment. The MDO can also generate a forecast based on manual inputs to help assist on picking the forecast that is most prefered. The forecast of the tons cane will be used for the following crop year.

The MDO can conduct surveys and field updates given that the farmer/s are unable to do it themselves.

**3.0 Posting in Forum**

**3.1 A farmer posts an existing Topic(Recommendation/Problem) in the forum**

A farmer posts in the forum regarding to a problem/recommendation in his field. The MDO will receive the post. Because the topic already exists, the MDO will reject the post. Once the post is rejected, the MDO may either refer the post to a problem or to a recommendation if necessary. The MDO can also comment on the post of the farmer for additional messages.

**3.2 A farmer posts a new topic(Recommendation/Problem) in the forum**

A farmer posted in the forum regarding to a problem in his field. The MDO will receive the post. Since the topic is new, the MDO will approve it. He has the option to create a new problem or a new recommendation. The MDO can also comment on the post of the farmer for additional messages.

**4.0 The MDO finds out that a typhoon is coming and will send alerts to the farmers.**

When the MDO sees that a typhoon is about to hit the district. He can send alerts to the farms that will affected. He can send additional messages in the alert. An example would be is to harvest all remaining crops in the field.

**4.1 The MDO will create a damage/disaster report**

The farmer would have to first report a disaster or damage in his field through the mobile application. The damage report would be received by the MDO in the web application. The MDO would then have to validate the report of the farmer. Afterwards the MDO can create a damage report with the damaged area.

**5.0 The MDO will create a recommendation and send it the farmer.**

The MDO will have two options. First is to create a recommendation that aims to solve problem and one that aims for improvement. For the first option, the MDO will fill up the basic details of the recommendation and will choose which problem/s the recommendation will aim to solve. If a problem is not selected, the MDO is to input the phase and the duration(amount of days the recommendation is viable) of the recommendation. For the second option, the recommendation will be based on the crop phases (e.g. planting, tillering). An example of that would be proper seed selection which would be in the planting phase. When the recommendation has been sent to the farmer, he has the option to accept or reject the recommendation.

**6.0 The Board logs-in to the system during the milling phase.**

Once the board logs in, he should be able to see the weekly production in the national level. It can be seen in a form of a line chart and is included with the average of the week. If the board notices that the production of given week is lower than expected, they can then drill it down to show the division per region. If the board notices that the production of a region during the specified week is lower than expected, the board can drill it down to show the production of the district inside the specified region. The board can then view each district to see the detail information(e.g. Crop Assessment report, Crop Estimate, and Production Treemap) of the selected district. Another action the board can do is create projects by going to the create programs page. They have to first select what problem in the district they want to address then the input the details of the project after which they are to input the different Performance Indicators of the project. The project creation will be then completed. Inside program details, the board member can see the improvement shown in a bar graph. The board can also view the current programs being implemented in each district. Upon selecting a program, they can see the progress of the program. The progress of the program is dependent on the value of the actual vs the target value from the performance indicator.

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**7.0 The Board logs-in to the system and it is not the milling phase.**

Once the board logs in, the board should be able to see the crop estimate page. This page contains the estimated production in lkg. This page will be used to help them in creating their sugar allocation. They will be able to generate forecast in lkg for the next week. The board member is able to view the ongoing programs and create a new one as needed. The board member generates a forecast for the next crop year.

**8.0 The board member wants the crop estimate to be adjusted/updated**

The crop estimate will be adjusted when there are disasters reported by the farmer through their mobile applications. The adjustment will be reflected on the total farm area of the district and the tons cane.

**9.0 A farmer will answer the crop validation survey through the mobile application**

The farmer will first be directed to the map where he can plot his area. He can then answer the other details in the form like fertilizer. Tillers can only be answered on the tillering phase.