Appendix L: Transcript of Interview
Interview Setting: SRA RD&E Office
Interview Date: February 9, 2016
Interviewee: Sir Fernando Corpuz

Natraj: We would like to confirm our understanding of the current processes.
Sir Corpuz: These reports comes from the mill district officers. This report is created weekly while this report is created four times during the production year. We have the pre-preliminary, preliminary, pre-final, and then the final. The crop year starts on September 1 (2015), and ends on August 31 of the next year (2016).
Natraj: Are the quarterly reports shown to the board?
Sir Corpuz: No, only the weekly reports.
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Sir Corpuz: These are the consolidation reports. This information will be consolidated into this report (Crop Assessment Report). We have nine reports (one per mill district) consolidated into this report (Crop Assessment Report per Region). What I'm showing you right now is for Luzon-Mindanao. Visayas only show us their Crop Assessment Reports and not the weekly reports and the reports per mill district. Visayas have more districts.
As early as June, the basis of our estimate is what transpired last crop year. The mill district officers (MDO) will prepare their crop estimates, then submit their reports.
In the pre-preliminary report, they base their estimates on historical data. But come October, they create their estimates based on the quality of the crop (sugar cane).
Natraj: From what we understand, the board uses the two reports, SMS and crop estimates, to determine the price for the following week.
Sir Corpuz: The SMS report will only contain the produced raw sugar.
Natraj: The problem with crop estimate is when we go down far to organizations, the reason for the two week delay, is because the organizations tend to give the data late.
Sir Corpuz: Yes
Natraj: That includes association and millers, or only associations?
Sir Corpuz: Mostly millers.
Natraj: What are the causes of delay?
Sir Corpuz: The cutoff is Sunday. For example, February 7 is a Sunday, and if the mill is organized with data, there will be no problem of getting the data by noon of February 8.
The keeper of data of the mills is in the laboratory, and when a truck enters the mill, they identify the weight of the cane, and how much sugar was produced out of the cane. They identify from which planter the cane came from, and from what farm. The planter can come from three different farms. But if the planter comes 4 pm, then the cane might be milled the next day because of the burden of the mills.
The mill will then unload this data to the planter's association. The associations may go to other mills so that they may know if the farmer gave sugarcane to the mill. And that is a cause of the delay because they have to go to other mills as well.

The SRA's regulatory department gets data from the mill daily. The SMS does not only report the production, but also reports also the withdrawals, the transfers, refineries. Some mills have refineries as well. But for RDE, our only interests are standing cane of the farm, from which farm the canes came, and raw sugar produced, which are reported weekly. The focus of our data is the farms. But the records are from the associations. The SMS only gets the sugar produced regardless of where the cane came from. If the mill district have only one mill like Cagayan, the report of the RDE and SMS should match because farmers don't have other options. But in Negros, where there are three mills, farmers can deliver to any of the three mills.

Natraj: Is there a system that tracks the standing cane?

Sir Corpuz: For example, last year the country was able to mill 4,000 hectares. And out of 4,000 hectares, we were able to get 50,000 tons cane. And from canes, we produced 100,000 bags of sugar. If a farmer was able to mill 100 hectares, and get 4,000 tons cane, and 8,000 bags of sugar. By getting data from the mills, the MDO would just subtract it. The agriculturist roams around the mill district every quarter of the crop year. They rely on the data of the mill for the weekly reports.

Natraj: What would happen to the remaining cane after the milling season?

Sir Corpuz: Sometimes the farmers leave sugarcanes standing. The farmers don't have to plant every year, because if they harvest, the cane will grow back. But if the farmer would like to plant again, they will leave some sugarcanes standing. When there's a rainfall, it will be difficult to harvest the sugarcanes because heavily loaded trucks will sink on the wet land. There are only roads on the side of the farms. The agriculturist advices the farmers to plant until the suggested date.

Natraj: Would it be possible to integrate SMS' report with RDE's report?

Sir Corpuz: Yes, because the source of RDE's report come from the mill as well, but they're just from different office. But the problem is RDE needs data from the other mills as well to know where else the planters milled, and SMS only needs the data of sugar produced regardless of source of the canes.

Natraj: Is there atleast one person at the mills?

Sir Corpuz: There are two, one is the agriculturist and is outside the mill, and the other one is for the SMS and is inside the mill.

Natraj: So how do they send their data?

Sir Corpuz: By email

Natraj: If we were to make the system, would it be good to have a centralized server.

Sir Corpuz: Yes, because, Visayas is separate from Luzon-Mindanao, they process their own data and just submit the summary.

Natraj: The system should also give a report every week?

Sir Corpuz: The data of the report should be at most one week delayed. Because, currently there can be two weeks of delay.

Natraj: Does SRA also advice farmers?

Sir Corpuz: Yes.

Natraj: Is it the two people from SRA the ones who give advice?
Sir Corpuz: No, only the agriculturist. The other only concerns with sugar monitoring and regulation. The planter may approach the agriculturist when he has a problem or an agriculturist identifies a problem in a farm and then we send experts to the planter. It requires scheduling, and the expert might get to the farm one week late or later.
Natraj: To confirm, the agriculturist creates the estimates while the one from the regulation only gets actual data?
Sir Corpuz: Yes
Natraj: In the board meeting, are there times when the estimates are different?
Sir Corpuz: Yes, they don't tally.
Natraj: Why won't they tally?
Sir Corpuz: If there are many sources, and frequent transferring of data, there is a possibility of duplicate data.
Natraj: In that case, would it be possible that we wouldn't it be able to tally it?
Sir Corpuz: We wouldn't be able to tally it, but we have standards for it. If the margin of error is 5% or below, then it is still ok for us. There are weeks that we went 7% off. By midseason, if the sugar traders identifies that there is a big difference, then they can influence the market. For example, if they identify that there will be a short or lack of sugar, then they resort to importation and it might affect the prices. Currently, there is an abnormally high price of sugar, which is a favor to the producers and the planters but not for the consumers. And that is our role, we have to balance them. We need to have good prices for the producers and affordable for the consumers.
Natraj: A while ago, you said that the mills are the reason for the delay of data?
Sir Corpuz: The mills actually have good systems but they are not open to sharing data, because the data is given to regulation officer from the SMS. But the mills don't give the data to the agriculturist because he is not from the regulation. And in that case, they report with incomplete data if data is missing from a mill.

Interviewee: Natalia Tasis
Interview Date: February 26, 2016
Jayson : We would like to know about the process of the SMS
Ms Tasis: SMS or sugar monitoring system is a kind of reporting system which are filled out by the sugar mills for submission. This SMS is done using excel. We have reports that are submitted every week. The cutoff for the mills is on a Sunday. We have report for raw sugar, refined sugar, and molasses for raw and refined. Components of the reports include raw production, refined sugar production. The most important data for us in the reports are the manufactured, withdrawals and balance. We report on actual production.
Natraj: Is the quedan measured by bag?
Ms Tasis: The quedan is the certificate of ownership which is by bag or L/KG.
Michael: Which reports are used for the board meeting?
Ms Tasis: The weekly reports I mentioned before are being used in the board meeting.
Jayson: Why is the withdrawal not matching with the quedan?
Ms Tasis: It will not match because for example the quedan sold depends on the sugarcane inputted. So like im a trader and I bought 1000 bags worth of quedan and I will present to the mill for withdrawal. So that's presented with the SRO or sugar release order. So its indicated there the volume of sugar. There are times that the SRO cannot be served in 1 surrender. So like sometimes only 500 bags are withdrawn. There are times that mills also issue the sugar as withdrawn when it has been sold and paid even if the physical stock has not been withdrawn.
Bryll: During the board meeting, what needs to be tallied in the report of Regulation department and Research development and extension department?
Ms Tasis: They compare the actual production and the estimated production.
Michael : How is the data gathered from the mills?
Ms Tasis: The mills sends their data to us through email every week.
Natraj: Is it the mills or the SRA person is the one sending data?
Ms Tasis: The Regulation Officer assigned is the one that sending the data to the main office. The mills. They send it sometimes by picture in email or in excel.
Natraj: Does SMS do forecasting?

Ms Tasis: No it is the RD&E who does the forecasting. They survey how much area is planted, and forecast what the sugar content is like 2 bags per tons cane. So we try to match the actual and the forecasted. Quedan is based on forecast. The allocation for the quedans are handled by the administrator on like how much should be allocated for domestic and export.
Bryll: How is the price determined?
Ms Tasis: The price is determined by district. The price is demand driven which is based on the withdrawals.
Natraj Do the mills check the sugarcane they receive?
Ms Tasis: The mills know very well how much area in their district. Their milling operations are programmed there. If how many days they will mill.
Jayson: What does the SRA monitor the sugar in the mill?
Ms Tasis: We have a personnel who checks that all sugar produced that are withdrawn are having proper documentation. There is the surrender of the quedan, issuance of the sugar release order.
Michael: Do the SRA personnel in find out which planters gave sugarcane to the mills?
Ms Tasis: No, the mill knows it. Every week there is a report called distribution report. The distribution report contains the individual planters that submitted their sugarcane to the mills.
Natraj: What is done with the excess quedan?
Ms Tasis: That is called "outstanding quedan". Quedan which was not withdrawn from the prescribed period. The mills sometimes bid out to clean their warehouses for the next crop year.

Interview Date: March 4, 2016
Interviewee: Sir. Max Pelle

Jayson: So how do you get the data from farmers?
Sir. Max Pelle: We do it by man to man approach and also surveys
Natraj: so who conducts the surveys?
Sir. Max Pelle: The agriculturist. The agriculturist are assigned to do the surveys per district.
Jayson: What data do you get as a Mill District Officer from the farmers?
Sir. Max Pelle: production data. Including the harvest area, farmer's name, tons cane, and how much left.
Natraj: so for the tons cane, do they record it on the day it was harvested or the week?
Sir. Max Pelle: Not actually on the day since after it was harvested, it is being sent to the mills to be weighted and provide the ticket.
Natraj: so the data you used for the crop estimate, where do you based it on?
Sir. Max Pelle: We based it on the crop validation surveys which is the surveys done in our sampling sites which is done by our team that is based on a location. But we can also ask help from other teams near to our location.
Natraj: so what is the use of crop estimation?
Sir. Max Pelle: The SRA use the crop estimate for decision making. So all crop estimate from the 27 districts are collected. So the board discussed about all these reports. The estimation that the agriculturist did, what are the crop assessment did by our inspectors, and the established area. So using the crop validation survey you can determine the bio mass you will receive.
Natraj: so how do you estimate one area?
Sir. Max Pelle: so we use the proof of ownership as our representation of area. But the issue was it was not the effective area planted.
Natraj: so how long do you do the crop estimate?
Sir. Max Pelle: we divided it to 4 estimates, Pre-preliminary, preliminary, pre-final, and final. In pre-preliminary, we based the estimate on the previous production of area harvested since it is only the end of the milling season so it is hard to make an estimate. In preliminary, we add in new parameters and gather information about how many were planted. In pre-final, it is already the end of the milling season and you can compare it with actual productions. And in the final, all are already milling, some are ending, and some are at their peak milling. In here, we can determine the stand of the actual and how close should the estimate be.
Sir. Max Pelle: it usually takes about 12 months for sugar cane after planting before it can be harvested. Depending on the growth stage of the sugar cane, it will be a sign for the start of the milling season but it depends on the weather. All throughout the year there is sugar cane but not throughout the year they can harvest. So usually the earliest, they start at September and usually end on May but it depends on the area.

Natraj: so how do you make the weekly production report?
Sir. Max Pelle: we usually start making the report when it is already the start of the milling season.
Bryll: so what is the purpose of the crop estimate?
Sir. Max Pelle: the crop estimate is important to determine the supply. It can also be used to determine the price of sugar.
Jayson: how do you compare the weekly production report?
Sir. Max Pelle: you use to compare the actual sugar, and it is being compared to the estimate. It can also be used to asses you estimate if it is accurate.
Jayson: why does the weekly production report have a delay?
Sir. Max Pelle: usually, the one that causes the delay is when the mill district officer doesn't get the production report since there is a cut-off. When this happens is usually causes a one week delay. There are even cases that the delay extends to two week due to the mills not providing the production report.
Natraj: so what is inside the mill report?
Interviewee 2: total sugar, and tons sugar cane.
Natraj: so do you use a map to determine the possible harvest area?
Sir. Max Pelle: we do use it but there a lot of factors cannot determine thus, we use surveys.
Natraj: is it important to have include factors?
Sir. Max Pelle: it is important since it really affects the crop estimate.
Natraj: does the Mill District Officer communicate with the Regulation Officer?
Sir. Max Pelle: yes they do, but only so that the Mill District Officer can get the weekly production.
Natraj: how often do you conduct surveys?
Sir. Max Pelle: there is two months interval on the start of the crop year.
Natraj: is it true that mill conduct their own surveys?
Sir. Max Pelle: yes they do to know their possible profit.
Jayson: we heard that you are picturing data from the planters, what data is it?
Sir. Max Pelle: so we picture sugar canes and the area from farmers to determine how good or the quality is based from that picture. We also used this picture to formulate an estimate.
Jayson: so what are other data do you gather for crop estimation:
Sir. Max Pelle: we also used to gather the length of the stalk, diameter, and the number of leaves. This data is being gathered by the agriculturist.
Natraj: so how do you make the crop growth monitoring?
Sir. Max Pelle: we based it on the 4 estimates and the production data.
Natraj: when providing recommendations to farmers, do you or the agriculturist send it directly to the farmers?
Sir. Max Pelle: yes we do.

Natraj: we have heard that traders create their estimate using the data they have. Where did they their data?
Sir. Max Pelle: the traders get their data from the mills

Interview Date: March 22,2016
Interviewee: Sir. Max Pelle
Michael: Can you explain the process of sugar allocation?

Sir. Max Pelle: The allocation is not fixed. Example the situation is that the target may not be achieved, so there is a possibility that no allocation will be done aside from domestic. Other factors include demand, prices. In sugar allocation, the demand, the consumption, and prices are analyzed because the allocation controls the movement of price. Mostly the basis of the prices are in Visayas.
Jayson: Is it the traders that control the price?
Sir. Max Pelle: They are the market force. What is in the market will be the one to dictate the price. Example the world market price is lower, it will also affect the local market. So price is demand driven as well as the allocation and that is why the allocation is not fixed. The allocation is also dependent on the supply. There is a trigger on when the allocation should change. Example, the first estimation is low, the common allocation is 100% to domestic, then they see a change in the next estimate. There they may decide on changing the allocation of sugar. When there is oversupply, the sugar is allocated to the reserve.
Natraj: So when there is a low in the supply, that is where you import?
Sir. Max Pelle: Yes
Michael: Who is responsible for importing?
Sir. Max Pelle: Traders, they get permits to import. They know the sugar supply is low based from the sugar order.
Jayson: Who gets the sugar orders?
Sir. Max Pelle: Mills, farms, traders.

Natraj: How is the demand gathered?

Sir. Max Pelle: Withdrawals and consumption. During board meetings, these are the factors that are considered. Other factors include, crop estimate, actual production, prices. The prices come from the traders.
Bryll: How do the traders give the price to SRA?
Sir. Max Pelle: Through the monitoring of the regulation department.
Natraj: Is there a report created after the allocation of sugar?
Sir. Max Pelle: The sugar order is created. The board secretary is the one making the sugar order. Also the sugar allocation is done after the pre-preliminary estimate.
Michael: What do you look into the crop assessment?
Sir. Max Pelle: We look into the productivity level in terms of TC and L/kg. We compare to the area harvested to get the productivity level. Example per hectare if it rises or not.
Jayson: Who does the productivity level?
Sir. Max Pelle: The mill district officer. Also the crop estimates have 2 months intervals.
Bryll: Why is the sugar allocation done after the pre-preliminary estimate?
Sir. Max Pelle: It is to allocate how much should be in each category.
Natraj: What factors are used?
Sir. Max Pelle :There are so many factors like soil type, soil fertility. Productivity level of the soil depletes overtime since the nutrients are depleted. So when the soil becomes acidic, the farming recommendation would be liming. If the fertility is low, then you add fertilizer. Other factors like nutrient content, variety of the seeds, cultivation, weeding and different cultural practices will affect the productivity level. An example be if the variety that the farmer is using is old, then it is susceptible to disease. You recommend varieties that are available to that area. The agriculturist or mill district officer roams around the farms of the district daily in order to be able to monitor all of the farms of the entire district.

Setting: SRA Larec office, Floridablanca, Pampanga
Date: August 23, 2016
Interviewee: Laverne Olalia (Mill District Officer)
Interviewer 1: Jayson Revidad
Interviewer 2: Natraj Rajput
Interviewer 3: Bryll Delfin
Interviewer 4: Michael Gochioco

Interviewer 1: May we clarify if you have farm level data?
Interviewee: We only have until barangay level data.
Interviewer 1: How do you collect data from the planters?
Interviewee: Example a planter has multiple areas. Halimbawa sa barangay na to kung 100 ha ilan ba yung pumasok sa barangay na yun. Halimbawa pumasok is 5000 tons so ang gagawin lang namin doon.. yung productivity per area is 5000 divided by 100, so meron kang 50 tons per ha for the whole barangay na yun. We combine the total area sa barangay from the profiling of the planters. In the forms, its average not per field.
Interviewer 1: Are there crop years where there are more area?
Interviewee: Meron pero hindi ganun karami. The área in our data is based from the interviews of the planters. So if they say 5 ha, then 5 ha will be reported.
Interviewer 1: Is there a difference between plant cane and ratoon cane?
Interviewee: Yes, yung plant cane is yung bagong tanim, ratoon cane naman yung after naharvest. This is also gathered through interviews.
Interviewer 2: How about the other reports like monitoring report?
Interviewee: That's for the production report. Ginagawa lang yun every opening ng milling. Halimbawa November up to march. So weekly may monitoring ka ilan na ba yung pumasok, ilan na yung namill versus dun sa estimated mo na remaining dun sa field.
Interviewer 2: How many people do the survey?
Interviewee: Isa lang.
Interviewer 2: How many farms are there in total?
Interviewee: In Pampanga, there are 6000 hectares.
Interviewer 2: So the monitoring is done weekly?
Interviewee: Yes, during milling season.
Interviewer 3: So do you interview each farm?
Interviewee: We do it sa sampling site? So every report sa farmer kumukuha kami sa mill.
Interviewer 1: So what is the purpose of the sampling sites?
Interviewee: In practical application, we do not have the resources to roam around each farm always so that's why we have sampling sites. So example for this area we have soil ph of this, so more or less I assumed that the area surrounding the sampling site will have the same soil ph. So example we go to an area we measure it and estimate versus magiging actual production niya.
Interviewer 2: How do you get the mill data?

Interviewee: We get it from the mill weekly. We use it to help validate the data on production.
Interviewer 4: Is the area harvested in the mill report?
Interviewee: wala. Ang adjustment lang namin doon is halimbawa meron akong 10 ha, ang production per ha lets say 50 tons per ha, so that's 50 times 10 so you have 500 tons. Kung pumasok mo is 100 tons, so minus ko lang dun sa 500 yung 100 and then I'll divide it by 50 so I will get 8 ha pa yung remaining ko.
Interviewer 2: How do you get the weather data?
Interviewee: We use manual which is rain gauge.
Interviewer 2: How about organic matter?
Interviewee: Last year, we got soil samples from the sampling sites. Other samples include, soil ph, N,P,K. Soil data is good for 3-4 years.
Interviewer 3: What other weather data is being used?
Interviewee: Rainfall only.
Interviewer 3: Can you explain more on sampling site?
Interviewee: Parameters for sampling, 1st is soil texture, halimbawa pag dito sa area na to magkakapareho na ang soil texture huwag ka na kukuha ulit. Hanap ka naman ng plant cane then hanap ka naman ng ganitong variety. So it depends on the location of the mill district.
Interviewer 3: Do the sampling sites change every year?
Interviewee : No.
Interviewer 2: Is there any validation on the sampling sites?
Interviewee: Validation would be sa actual yield. A crop year starts from September to end of august. So submission of crop estimate sa pre preliminary we need that by august. Yung preliminary October yan so may period lang talaga. If your estimating the 40 tons per ha pero yung pumapasok ivavalidate mo lang yun. In 1 ha yun lang pala nakuha niya so aadjust mo siya.
Interviewer 4: How do you use these data for recommendations?
Interviewee: If you know which area is not doing well it may be because of lets say mababang rainfall. Recommendations could be lets say plant drought resistant variety. So lahat ng productivity na yan will relate to what intervention can be done.
Interviewer 2: So what if a barangay has low productivity, do you go there and ask?
Interviewee: Yes we go there and investigate bakit kaya mababa ung production. What was the problem.
Interviewee 4: Can you explain to us about crop estimate?
Interviewee: 1st important factor is rainfall. So upon given soil potential, yung area very iba iba siya. So ang ginagawa is soil potential, variety. Season of harvest, so may optimum yield. So depende sa kanyang establishment. During the planting, you have rain which is favorable so dapat pag nagtanim ka ng sugarcane so may initial soil moisture. So habang nag gegerminate, ang tubo kasi pag sobra ang ulan hindi maganda. Pag dating nung summer yung kanyang tillering stage and then yung planter natin sa Pampanga generally

hindi nagiirigate. So ang kanilang basis para magstart silang mag fertilize is during May. Halimbawa nag delay ang rainfall ng May, expect na natin na mababa yung lkg nun kasi delayed na yung fertilization e assuming na tapos na yung germination. Next stage is where kelangan na kelangan na niya yung tubig. So pwede gawan ng assessment where kapag niplug-in mo yung rainfall data, ano yung potential yield na pwede niyang ibigay. And then yung isa rin na tinitingnan natin is hindi naman lahat naghaharvest ng November diba? Staggard din siya. Usually yung planting season is November to mga February. After that wala ng planting. Start na ng planting kasi haharvest mo na yung mga old ratoons, panget na mga yun. So mga stages ng crop growth may favorable amount of rainfall. I have to ask, you want to project to until a period. So tell me first how many na yung nag germinate? So pag halimbawa 90% I can answer. Pag yung tubo mabigat, meaning marami ang water content so matabang siya and mababa ang Lkg niyan. Pag magaan, meaning matamis ang tubo.

Interviewer 2: How about the thresholds?

Interviewee: For that, you use the attainable or record high so that's the threshold. Highest and lowest recorded.

Interviewer 2: How do you interpret the rainfall pattern?

Interviewee: Based lang sa paglaki ng tubo and the rainfall pattern changes every year. You also use historical data to back it up. Rainfall has the biggest impact also sa crop estimate. We base yung rainfall data sa PAGASA.

Interviewer 4: Do you have plans and programs implemented in the district?

Interviewee: Yung mga outreach programs, training sa farmers. We promote mga high yielding varieties, mga magandang cultural practices.

Interviewer 3: How about the cellphones that the farmers use?

Interviewee: Yung iba smartphones and yung normal na cellphone lang.

Interviewer 2: Can you explain more about crop estimate?

Interviewer: Sa crop estimate, ok sana na maraming parameters ang magagamit, pero sa current data natin, hindi pa natin magagamit ng tama ang mga parameters like brix, soil nutrients and diameter since 1 yr worth of sampling site data pa lang ang meron. So far ang gamitin niyo is average temperature na meron sa internet, rainfall and tiller count in terms of average count niya per year. So for the formula, try researching for multiple regression formula since pwede naman ang konting variables dun.

Follow up Interview with Mr. Laverne Olalia

Date: March 2, 2017

Natraj: Would it be fine to have an improvement report together with the crop assessment?

Laverne: It is fine as long as it does not affect the other data of the original report.

Jayson: Sir, question if the recommendations sa comparison would it be ok if its filtered by phase?

Laverne: Yes ok siya na gawing by phase kasi magandang malaman natin yung mga ginagawa nilang recommendations per phase and kung ongoing implementation pa ba sila. Sa problems hindi na kailangan kasi we want to know lahat ng problems regardless of phase.
Michael: Sir what do think of the system?
Laverne: Ok naman yung system as a whole. Madaming features na gusto namin. I think maganda kung may tagalog language sa mobile application para mas madalian ang farmers.